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**HEALTH REPORT** (3)  
FOR THE  
**CITY OF NEWARK** (1)  
↔  
**1940**



HON. JOHN A. BRADY,  
Director of Public Affairs.

(2) Department of Health, Newark, N. J.  
CHARLES V. CRASTER, M.D., D.P.H.,  
Health Officer.

STATISTICAL STUDIES AND  
EDITING OF THIS REPORT BY  
ROBERT F. MORGAN  
2ND ASST. HEALTH OFFICER

## THE INDIVIDUAL MUST HELP

DR. J. L. HYDRICK OF THE NETHERLAND PUBLIC HEALTH SERVICE, BATAVIA, JAVA, SAYS:

"DOING THINGS FOR PEOPLE IS OFTEN EASY, BUT IT IS OFTEN EXPENSIVE AND OF TEMPORARY BENEFIT. SHOWING PEOPLE HOW TO DO THINGS FOR THEMSELVES MAY TAKE A LITTLE MORE TIME, BUT IT IS RELATIVELY INEXPENSIVE AND ITS RESULTS ARE LASTING.

"THE GREAT HOPE FOR PUBLIC HEALTH WITHIN BUDGETARY LIMITATION LIES IN SECURING MORE HEALTHFUL LIVING ON THE PART OF THE PEOPLE".

*Charles V. Croaster*

M.D., D.P.H.

HEALTH OFFICER

NEWARK, N.J., MAY 1940.

THIS REPORT COVERS 1940 DURING WHICH YEAR WE WERE UNDER THE SUPERVISION OF HONORABLE PEARCE R. FRANKLIN, DIRECTOR OF PUBLIC WORKS.

IT IS ADDRESSED, HOWEVER, TO HONORABLE JOHN A. BRADY, DIRECTOR OF PUBLIC AFFAIRS, WHO HAS TAKEN OVER THE SUPERVISION OF THE HEALTH DEPARTMENT AND UNDER WHOSE ADMINISTRATION WE LOOK FORWARD WITH CONVICTION TO CONTINUED PROGRESS.

# HEALTH REPORT- -1940

NEWARK N.J.

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# HEALTH REPORT--1940 NEWARK N.J.

CHARLES V. CRASTER, M.D., D.P.H. -- HEALTH OFFICER



TO HONORABLE JOHN A. BRADY, DIRECTOR OF PUBLIC AFFAIRS

AND TO THE CITIZENS OF NEWARK, N. J.

## PUBLIC HEALTH IS ESSENTIAL FOR NATIONAL DEFENSE

IT IS A PLEASURE TO REPORT THAT NEWARK RATES AND STATISTICS FOR 1940 CLEARLY SHOW A CONTINUED TREND TOWARD BETTER HEALTH. THIS IS ESPECIALLY ENCOURAGING AT A TIME WHEN A WORLD-WIDE UPEHAVAL IS FORCING US TO PREPARE NOT ONLY FOR STRONGER BODIES AND HAPPIER LIVES, BUT FOR ACTUAL DEFENSE OF OUR AMERICAN WAY OF LIFE.

UNFORTUNATELY THE CRUDE DEATH RATE SHOWED AN INCREASE BUT STUDY OF CAUSE AND AGE AT DEATH CONFIRMS THE CLAIM THAT NEWARK CITIZENS ARE HEALTHIER AND LIVING LONGER. OF PARTICULAR SIGNIFICANCE OF COURSE, WAS A FULL YEAR WITHOUT A SINGLE CASE OR DEATH FROM DIPHTHERIA. IN ADDITION TO THIS, THERE WAS A GREAT REDUCTION IN PNEUMONIA FATALITY FROM 20% PRIOR TO 1939 TO ONLY 12.3% FATAL TERMINATIONS IN 1940. THE INFANT MORTALITY RATE OF 35.1 WAS THE LOWEST EVER RECORDED AND NEW LOW CASE FATALITY RECORDS WERE ESTABLISHED FOR MEASLES, SCARLET FEVER AND WHOOPING COUGH. IN ADDITION TO THIS, THE PROPORTION OF DEATHS WHERE THE INDIVIDUALS HAD PASSED THEIR 45TH AND 65TH YEARS OF LIFE SHOWED A GREAT INCREASE.

DURING 1940, MUCH NEW EQUIPMENT WAS SECURED AND NEW TYPES OF WORK STARTED. OUR NEW STATIONARY FLUOROSCOPE MADE POSSIBLE BETTER CHEST EXAMINATIONS OF ALMOST 6,000 DOMESTICS AND FOOD HANDLERS. A NEW PORTABLE FLUOROSCOPE AND ELECTRO CARDIOGRAPH AND THE APPOINTMENT OF AN INDUSTRIAL HYGIENE PHYSICIAN, ENABLED US TO START IN THE LATTER PART OF THE YEAR, OUR DRIVE FOR THE EXAMINATION OF LARGE GROUPS OF INDUSTRIAL WORKERS AT THEIR PLACE OF EMPLOYMENT. A DENTAL X-RAY MACHINE WAS SECURED AND A TECHNICIAN APPOINTED MAKING IT POSSIBLE TO GIVE IMMEDIATE TREATMENT WHERE HERETOFORE PATIENTS WERE REFERRED TO THE CITY HOSPITAL FOR X-RAY PICTURES. AN INNOVATION DURING THE YEAR WAS THE ESTABLISHMENT OF AN EMPLOYABILITY CLINIC WHICH MADE IT POSSIBLE TO WEED OUT FROM OUR RELIEF LIST OF CLIENTS, A GREAT NUMBER WHO CLAIMED THEY WERE UNABLE TO WORK BUT EXAMINATION AT OUR CLINIC PROVED OTHERWISE. IN ADDITION TO THIS, MANY WERE FOUND TO BE SUITABLE FOR SPECIAL TYPES OF WORK.

OUR DIPHTHERIA IMMUNIZATION WPA PROJECT HAVING COMPLETED ITS WORK, APPROVAL WAS SECURED FROM THE GOVERNMENT TO START A WHOOPING COUGH VACCINATION CAMPAIGN IMMEDIATELY AFTER THE

FIRST OF 1941. THE YEAR ALSO MARKED THE STARTING OF A BETTER ARRANGEMENT FOR VISUAL HEALTH EDUCATION. A PHOTOGRAPHER WAS APPOINTED TO TAKE COLORED LANTERN SLIDE PICTURES OF OUR VARIOUS TYPES OF WORK AND ANOTHER OF OUR STAFF WAS PUT IN CHARGE OF COLLECTING HEALTH MOVIES AND ARRANGING FOR SHOWING OF HEALTH PICTURES AND THE GIVING OF LECTURES TO THE PUBLIC.

IN LOOKING OVER THE HEALTH RECORD FOR 1940, A YEAR RECORDING A HIGH PREVALENCE OF COMMUNICABLE DISEASES, IT IS DESIRABLE TO DETERMINE HOW FAR THIS UNUSUAL VISITATION WAS WITHIN THE POWER OF THE HEALTH DEPARTMENT TO CONTROL.

DURING THIS YEAR, WE HAD 17,692 CASES OF DISEASE RECORDED IN THE DEPARTMENT (NOT INCLUDING VENEREAL DISEASES). THIS WAS MORE THAN TWICE THE NUMBER REPORTED FOR THE PREVIOUS 12 MONTHS.

HEADING THE LIST WAS MEASLES WITH 6,878 REPORTS, MUMPS 3,503, CHICKENPOX 2,439, WHOOPING COUGH 1,051 AND SCARLET FEVER 931. WITH THE EXCEPTION OF THE LAST TWO DISEASES WHICH WERE BY THE BY, WELL BELOW THE NORMAL RECORD, THE GREATER NUMBER OF CASES TALLING 12,280, WERE IN DISEASES OVER WHICH HEALTH DEPARTMENT MEASURES CAN DO LITTLE TO CONTROL.

BY REASON OF THEIR HIGH INFECTIVITY AND IN SOME DISEASES THE VIRUS BEING PRESENT IN THE NOSE AND THROAT BEFORE SPECIAL SYMPTOMS DEVELOP, IT COMES ABOUT THAT THE INFECTIONS ARE SPREAD TO SUSCEPTIBLE CHILDREN LONG BEFORE THE DOCTOR IS CALLED IN. MANY OF THESE CASES ARE SO MILD THAT THE FAMILY DOES NOT CALL IN A PHYSICIAN AT ALL, SO THAT THE DISEASE IS CARRIED TO OTHER MEMBERS OF THE FAMILY AND TO THE NEIGHBORHOOD AS WELL. PLACARDING AND QUARANTINING ALTHOUGH A USEFUL AND IMPORTANT PROCEDURE IS UNABLE TO CONTROL THE SPREAD OF ANY OF THESE DISEASES ONCE IT IS ESTABLISHED IN ANY ONE SPOT.

### THE ASTONISHING DIPHTHERIA RECORD

IN SPITE OF THE HIGH EPIDEMIC REPORT FOR THE YEAR, THE CITY HAS ACHIEVED OUTSTANDING RECORDS IN THE CONTROL OF FORMERLY WIDESPREAD

EPIDEMICS.

THAT THE YEAR 1940 PASSED WITHOUT A SINGLE CASE OF DIPHTHERIA RECORDED IN THE CITY IS AN ASTONISHING AND NOTWORTHY EVENT. IN 1929 THE CITY HAD 1,717 CASES OF DIPHTHERIA AND 96 DEATHS REPORTED. WITH THE MASS IMMUNIZATION OF OUR SCHOOL CHILDREN THERE REMAINED THE PROBLEM OF PROTECTING THE PRE-SCHOOL CHILD WHICH WAS COMPLETELY CARRIED OUT BY 1940 WITH THE AID OF FEDERAL U.P.A. PROJECTS.

REDUCTION OF PNEUMONIA DEATHS

TO SHIFT THE SPOTLIGHT FROM INFANTS TO THE GROWN-UPS WE HAVE REASON TO BE GRATIFIED BY THE REDUCTION OF OUR PNEUMONIA DEATHS IN 1940. UNTIL SOME SUCCESSFUL METHOD OF PREVENTING PNEUMONIA IS DEVELOPED, HEALTH EFFORTS MUST BE DIRECTED AGAINST THE POSSIBILITY OF A FATAL ENDING TO THE PNEUMONIA PROCESS.

IT IS INDEED HEARTENING THEN TO REPORT THAT 1940 SHOWED A SIZEABLE REDUCTION IN OUR CASE FATALITY RATE FROM THIS DISEASE DURING THE YEAR. PNEUMONIA ATTACKS THE ADULT GROUP MOST COMMONLY AT THE WAGE-EARNING PERIOD. A VIGOROUS CAMPAIGN DIRECTED TOWARD THE FREE DISTRIBUTION OF SERUM AND SULFAPYRIDINE TO THE INDIGENT PNEUMONIA SUFFERERS AS WELL AS AN EFFORT TO OBTAIN EARLIER DIAGNOSIS HAS BORNE EXCELLENT RESULTS DURING THE YEAR. THERE HAS HAPPENED WITHIN A SHORT PERIOD OF TIME, TEN YEARS, A DRAMATIC CHANGE IN OUR ATTITUDE TO PNEUMONIA. WITH THE INTRODUCTION OF THE ANTI-SERUM AND THE USE OF THE SULFAPYRIDINE GROUP OF CHEMOTHERAPY, PNEUMONIA HAS BECOME A CONTROLLABLE DISEASE. AT LEAST THE CASE MORTALITY IS WITHIN OUR CONTROL.

IS WHOOPING COUGH CONTROL IN SIGHT?

THE WORK STARTED IN THE GRAND RAPIDS DEPARTMENT OF HEALTH BY DR. GRACE KENDRICK IN IMMUNIZING CHILDREN OF SUSCEPTIBLE AGE WITH WHOOPING COUGH VACCINE HAS PRODUCED ENCOURAGING RESULTS IN REDUCING WHOOPING COUGH PREVALENCE IN THAT CITY. IN 1939 A START WAS MADE IN IMMUNIZING CHILDREN AGAINST WHOOPING COUGH IN A SPECIAL CLINIC WHICH WAS CONTINUED DURING 1940. EFFORTS WILL BE MADE TO HAVE ALL PRE-SCHOOL CHILDREN SO PROTECTED WITH THE ASSISTANCE OF A U.P.A. PROJECT WHICH IS TO REPLACE THE DIPHTHERIA PROJECT. IT IS PROBABLE THAT WHOOPING COUGH MAY BE THE NEXT EPIDEMIC DISEASE TO GO, FOLLOWING DIPHTHERIA, SMALLPOX AND TYPHOID FEVER, INTO THE HISTORY OF YESTERDAY.

CHEAPER AND HEALTHIER DWELLINGS

DURING THE YEAR 1940, THE FEDERAL HOUSING PROJECT TO PROVIDE SIX HOUSING UNITS TO ACCOMMODATE 2,469 FAMILIES IN THE CITY HAS RAPIDLY APPROACHED COMPLETION. IT IS TO BE HOPED THAT THIS WILL BE ONLY THE BEGINNING OF AN EFFORT SO LONG DELAYED TO PROVIDE THE LOW-WAGE WORKER WITH REASONABLY MODERN AND ADEQUATE HOUSING. IN AN EXTENSIVE REAL PROPERTY SURVEY CONDUCTED BY THE

NEW JERSEY HOUSING AUTHORITY IN NEWARK, THE CITY WAS DIVIDED INTO ENUMERATIVE DISTRICTS AVERAGING THREE CITY BLOCKS. EACH UNIT DISTRICT WAS THEN SCORED AS TO THE AGE OF THE INDIVIDUAL PROPERTY, ITS CONDITION, THE HEATING, TOILET AND BATH ACCOMMODATIONS AS WELL AS THE RENTS CHARGED. POINTS WERE ALLOTTED WITH A MAXIMUM TOTAL OF 100 SET UP FOR A PERFECT SCORE. ON THE BASIS OF THIS SURVEY IT WAS FOUND THAT OUT OF A TOTAL OF MAXIMUM CREDITS OF 100, NEWARK'S DWELLINGS RATED 58.6%, PROBABLY MOST SIGNIFICANT AS INDICATING THE AGEING OF OUR WORKERS' DWELLINGS, THE TOTAL SCORE FOR SUCH AN IMPORTANT ITEM AS HEATING FACILITIES WAS 5.5 OUT OF A POSSIBLE TEN, INDICATING THAT 45% OF NEWARK UNITS LACKED CENTRAL HEATING FACILITIES. IN THE SCORE FOR AGE THE TOTAL POINTS FOR ALL DWELLINGS IN THE CITY WAS 5.2, INDICATING AN AVERAGE AGE FOR ALL HOMES IN THE CITY OF BETWEEN 30 AND 50 YEARS.

IT IS CLEAR THAT THE MAJORITY OF SUCH HOMES LACK THE REQUIREMENTS OF MODERN LIVING AND THAT ALTERATIONS NECESSARY TO BRING THEM UP TO PRESENT-DAY REQUIREMENTS WOULD TAX THE ABILITY OF THE OWNER TO ACCOMPLISH. THE SOLUTION TO MEETING FUTURE HOUSING NEEDS WITHIN THE CITY MUST REST UPON A BROAD PROGRAM OF SLUM CLEARANCE AND THE BUILDING OF MODERN HOUSING UNITS EITHER PRIVATELY OR OFFICIALLY INSPIRED.

MEDICAL CARE OF THE POOR

THE CITY OF NEWARK MAY BE TAKEN AS A TYPICAL SET-UP FOR THE MEDICAL CARE OF THE POOR BY MUNICIPAL GOVERNMENT. BY MEANS OF A FREE DISPENSARY SERVICE THE CITY PROVIDES MEDICAL AND SURGICAL CARE WITH AN ANNUAL SERVICE OF 300,000 DISPENSARY VISITS AND ABOUT HALF THAT NUMBER OF FREE MEDICAL PRESCRIPTIONS FILLED. BESIDES THIS SERVICE, HOME CALLS BY VISITING PHYSICIANS WERE MADE TO THE NUMBER OF 25,654 LAST YEAR.

UNDER THIS SYSTEM THE COST OF MEDICAL CARE TO THE INDIGENT IS KEPT DOWN TO ABOUT 25¢ PER DISPENSARY CALL AND 75¢ PER HOME CALL. THERE CAN BE NO DOUBT THAT VERY DRASTIC CHANGES WILL BE MADE IN THE NEAR FUTURE TO IMPROVE THE STANDARD OF MEDICAL CARE AND TO GIVE A GREATER COMPENSATION TO THE PHYSICIAN MINISTERING TO THE NEEDS OF THE POOR.

APPARENTLY THERE IS A DEMAND FOR THE POOR PATIENT TO BE GIVEN THE FREE CHOICE OF PHYSICIAN TO BE CALLED. THIS CAN ONLY BE DONE BY ADOPTING A SYSTEM OF MUCH HIGHER FEES TO BE PAID TO THE PHYSICIAN THAN AT PRESENT.

WITH THE FURTHER DEVELOPMENT OF HEALTH AND HOSPITAL INSURANCE FOR THE FAMILY OF MODERATE MEANS THERE SHOULD BE AN END MADE OF GIVING MEDICAL SERVICE TO ANY FAMILY OTHER THAN THOSE DIRECTLY ON THE RELIEF ROLLS OF THE CITY. THIS WOULD RETURN THIS SERVICE TO THE POOR FOR WHOSE BENEFIT IT WAS ORIGINALLY CONTEMPLATED.

## MODERN FOOD & DRUG CONTROL

IN THESE TIMES OF COMPETITIVE BUSINESS AND WIDELY VARYING MARKET PRICES ON COMMODITIES, FOOD, DRUGS AND COSMETICS, THERE ARE ALWAYS SOME UNSCRUPULOUS MANUFACTURERS, WHOLESALEERS, DISTRIBUTORS AND RETAILERS WHO AVAIL THEMSELVES OF EVERY SUBTERFUGE, EVERY POSSIBLE AND ILLEGITIMATE MEANS OF PASSING ON TO THE CONSUMERS, SUBSTANDARD, ADULTERATED, MISBRANDED AND OFTEN HARMFUL FOOD, DRUGS AND COSMETICS.

IT HAS BEEN THE AIM OF THE FEDERAL, STATE AND LOCAL AUTHORITIES TO ELIMINATE WHEREVER POSSIBLE, BY CONDEMNATION, PUBLICITY AND LEGISLATION, SUCH PRODUCTS FROM OUR MARKETS. THE NEW FEDERAL AND STATE FOOD & DRUG ACTS HAVE BEEN DESIGNED TO STOP LOOPHOLES IN THE OLD REGULATIONS AND TO THOROUGHLY MODERNIZE THEM.

THE OLD REGULATIONS WERE DESIGNED FOR CONSUMER PROTECTION AND TO PROTECT HONEST MANUFACTURERS AND DEALERS FROM UNFAIR COMPETITION. SINCE THEY WERE ENACTED THERE HAS BEEN A DECIDED IMPROVEMENT IN THE CHARACTER OF INTERSTATE AND INTRASTATE TRAFFIC IN FOODS. FOOD MANUFACTURERS QUICKLY RECOGNIZED THAT THESE LAWS ACTUALLY IMPROVED THEIR BUSINESS AND THEREFORE LENT THEIR COOPERATION WHOLE-HEARTEDLY IN THE ENFORCEMENT OF THESE LAWS.

TODAY THE AMERICAN FOOD SUPPLY PROBABLY ATTAINS A HIGHER STANDARD OF EXCELLENCE THAN THAT OF ANY OTHER COUNTRY IN THE WORLD. CONDITIONS WERE NOT ALWAYS SO. LOOK BACK A HUNDRED YEARS TO THE TIME WHEN FREDERICK ACCUM, A DISTINGUISHED CHEMIST, WROTE HIS BOOK ON FOOD ADULTERATIONS AND CULINARY POISONS. IN THAT BOOK, ACCUM SAID "IT WOULD BE DIFFICULT TO MENTION A SINGLE ARTICLE OF FOOD WHICH IS NOT TO BE MET WITH IN AN ADULTERATED STATE; AND THERE ARE SOME SUBSTANCES WHICH ARE SCARCELY EVER TO BE PROCURED GENUINE." THAT BOOK PROVED TWO THINGS: FIRST: THAT CONSUMERS WERE THEN BEING DEFRAUDED BOTH AS TO HEALTH AND POCKETBOOK; SECONDLY: THAT FOOD MANUFACTURERS WERE ENGAGED IN A FORM OF RUTHLESS, UNETHICAL COMPETITION WHICH WAS BOUND TO BE DISASTROUS, UNDERMINING AS IT DID, PUBLIC CONFIDENCE IN THE INTEGRITY OF THEIR WARES.

AT THE PRESENT TIME, IT IS WELL KNOWN, THAT THE AVERAGE AMERICAN MANUFACTURER AND PURVEYOR OF FOOD PRODUCTS IS A LAW-ABIDING CITIZEN, DESIROUS OF GIVING HIS PATRONS A SQUARE DEAL BY DISTRIBUTING NOTHING BUT WHOLESOME AND HONESTLY LABELED ARTICLES. LAWS ARE MADE AND ENFORCED, HOWEVER, BECAUSE OF THE MINORITY WHO, UNLESS CONTROLLED, WOULD DAMAGE IN A SERIOUS WAY, BOTH CONSUMERS AND HONEST COMPETITORS. AGAIN, PRESENT-DAY CONDITIONS IN THE FOOD AND DRUG INDUSTRIES HAVE ALTERED IN RATHER ASTONISHING WAYS SINCE THE ADOPTION OF THE OLD LAWS. THE INTERVENING YEARS HAVE WITNESSED A GRADUAL TRANSFER OF OUR NATIONAL FOOD AND DRUG MANUFACTURING OPERATIONS FROM THE KITCHEN TO THE FACTORY. PRODUCTS ONCE PREPARED AT HOME ARE NOW PREPARED

BY COMMERCIAL MANUFACTURERS. SCIENTIFIC METHODS AND MASS PRODUCTION HAVE MADE IT POSSIBLE FOR THE FOOD AND DRUG MANUFACTURER TO BEAT THE HOUSEWIFE'S COST OF PRODUCTION AND MATCH OR EVEN BETTER THE QUALITY OF HER PRODUCT.

CHANGES IN MANUFACTURING PRACTICES AND SALES PROCEDURE HAVE BEEN JUST AS EXTRA-ORDINARY SINCE 1906. THE MODERN TREND OF ADVERTISING COULD NOT POSSIBLY HAVE BEEN FORESEEN WHEN THE ORIGINAL LAWS WERE PASSED. HONEST LABELING, ALONE, WHICH WAS REQUIRED BY OUR OLD LAWS, IS NO LONGER SUFFICIENT TO GIVE CONSUMERS THE PROTECTION AGAINST DECEPTION IN THE SALE OF FOODS AND DRUGS THAT LEGISLATURES INTENDED.

OUR PRESENT LAWS ARE INTENDED TO DO FOR HONEST AND LEGITIMATE MANUFACTURERS WHAT ONLY OUR GOVERNMENTAL AGENCIES CAN EFFECTIVELY ACCOMPLISH, IF GIVEN THE PROPER AUTHORITY. THEY RETAIN THE NUMEROUS PROVISIONS OF THE OLD REGULATIONS WHICH HAVE PROVED EFFICACIOUS IN CONSUMER PROTECTION. THEY CORRECT OR AMEND THOSE PROVISIONS WHICH HAVE BEEN PROVEN INEFFECTIVE IN THE LIGHT OF JUDICIAL INTERPRETATIONS. THEY ADD PROVISIONS DESIGNED TO CONTROL THOSE CONDITIONS IN MODERN INDUSTRY WHICH AFFECT THE HEALTH AND ECONOMIC WELFARE OF THE CONSUMER.

F. B. LINTON IN ONE OF HIS ARTICLES SAID THE POWER OF PUBLICITY CAN BE USED EFFECTIVELY TO DETER MEN FROM PRACTICES THAT ARE DETRIMENTAL OR EVEN UNETHICAL. SUCH PRACTICES CAN SURVIVE IN THE FOOD, DRUG AND COSMETIC INDUSTRIES ONLY WHEN A CONSIDERABLE PORTION OF THE PUBLIC DOES NOT KNOW ABOUT THEM. SHARP PRACTICES THAT MAY BE PROFITABLE AT LEAST FOR A TIME, IF CARRIED ON IN THE DARK, BECOME EXCEEDINGLY UNPROFITABLE WHEN THE LIGHT OF PUBLICITY BRINGS THEM TO THE VIEW OF THE PROSPECTIVE BUYERS AND DUDES.

IF THERE IS ONE SECTION OF THE NEW REGULATIONS THAT CONTAINS MORE POTENTIAL DYNAMIC POWER THAN ANY OTHER, IT IS THAT SECTION RELATING TO PUBLICITY. EVEN THE GREATLY INCREASED PENALTIES PROVIDED FOR BY THESE LAWS, WOULD NOT BE EFFECTIVE AS A DETERRENT OF ILLEGAL PRACTICES THAN WILL PUBLICITY. TIMELY PUBLICITY MAY INDEED BE THE MOST EFFECTIVE DETERRENT BECAUSE, IN THE OPINION OF MANY, IT ACTUALLY BRINGS THE HEAVIEST PENALTY.

PUBLICITY CAN BE USED ALSO TO FURNISH CONSUMERS WITH TIMELY INFORMATION THAT WILL SERVE, TO SOME EXTENT AT LEAST, TO GUIDE THEM IN THEIR PURCHASES OF FOOD, DRUGS AND COSMETICS. PUBLICITY, WHEN TIMELY, PRODUCES ITS EFFECTS QUICKLY. IN THIS IT CONTRASTS SHARPLY, WITH THE SLOW PROCEDURE SOMETIMES INVOLVED IN PROSECUTIONS IN THE COURTS. A CLEVER DEFENSE LAWYER CAN CAUSE BY VARIOUS EXPEDIENTS, INTERMINABLE DELAYS IN THE SETTLEMENTS OF ISSUES IN COURT.

THE COST OF ENFORCING FEDERAL, STATE AND MUNICIPAL FOOD AND DRUG CONTROL LAWS MUST BE REDUCED. TAXPAYERS DEMAND IT. THE FINANCIAL SITUATION REQUIRES IT. THE QUESTION THAT CONFRONTS EVERY EARNEST FOOD AND DRUG CONTROL OFFICIAL WHO RECOGNIZES THE NECESSITY OF REDUCTION IN EXPENDITURES, IS - HOW CAN THE COST BE REDUCED WITH THE LEAST POSSIBLE CURTAILMENT OF THE ESSENTIAL ACTIVITIES?

FROM THE POINT OF VIEW OF THE CONSUMERS AND OF PRODUCERS, THE EFFECTIVENESS OF FOOD AND DRUG CONTROL OPERATIONS SHOULD BE MAINTAINED, AND, IF POSSIBLE, INCREASED. IN TIMES OF RAPIDLY FLUCTUATING PRICES, WHETHER THE CHANGE BE UPWARD OR DOWNWARD, THE OPPORTUNITIES FOR PROFIT THROUGH SUBSTITUTION AND OTHER FORMS OF ADULTERATIONS, ARE GREATLY INCREASED. WHEN SELLING PRICES ARE RAPIDLY FALLING, FOOD PACKERS AND MANUFACTURERS ARE SORELY TEMPTED TO ELIMINATE SOME OF THE USUAL SAFEGUARDS REQUIRED BY SANITARY SCIENCE IN ORDER TO REDUCE THEIR COSTS, EVEN THOUGH THEY MAY THEREBY INCREASE THE CHANCES OF CONTAMINATION OF THEIR PRODUCTS AND JEOPARDIZE THE HEALTH OF CONSUMERS. ONE OF THE MOST EFFECTIVE INCITEMENTS NOT TO YIELD TO TEMPTATION IS THE MANUFACTURER'S KNOWLEDGE THAT ALERT AND COURAGEOUS FOOD AND DRUG OFFICIALS WILL CERTAINLY SEE TO IT THAT THE CHANNELS OF COMMERCE AND LOCAL MARKETS WILL BE CLOSED TO CONTAMINATED OR OTHERWISE ADULTERATED PRODUCTS.

THE MEN OF VISION IN THE VARIOUS FOOD, DRUG AND COSMETIC INDUSTRIES, NEED NO EXTERNAL BRACING TO HOLD UP THE STANDARD OF THEIR PRODUCTS EVEN IN TIME OF STRESS. BOTH THEIR INTELLIGENT SELF-INTEREST AND THEIR INNATE SENSE OF FAIRNESS IMPEL THEM TO DO SO. THEY DO NEED, AND ARE ENTITLED TO RECEIVE, HOWEVER, PROTECTION FROM UNFAIR COMPETITION OF SOPHISTICATED PRODUCTS. FOR, UNFORTUNATELY, THERE ARE IN EVERY INDUSTRY, SOME MEN, WHO LACK THE VISION AND MORAL STAMINA TO HOLD UP THE STANDARD OF THEIR PRODUCTS WHEN TO DO SO MAY INVOLVE A TEMPORARY LOSS. THEIR BREAKDOWN IS DEMORALIZING TO THE INDUSTRIES AND MAY BE DISASTROUS TO CONSUMERS. THE EFFECTIVE ENFORCEMENT OF FOOD AND DRUG CONTROL LAWS AT THIS TIME IS THEREFORE, ESPECIALLY URGENT.

THE ALERT FOOD AND DRUG OFFICIAL WILL TAKE ADVANTAGE OF THE REDUCTION IN THE COST OF SUPPLIES AND OF SOME SERVICES, AND WILL CUT EXPENSES WHEREVER POSSIBLE. BUT THIS IS NOT ENOUGH TO MEET THE SITUATION. THE SIZE OF THE STAFF OF MOST FOOD AND DRUG CONTROL UNITS IS RIGIDLY LIMITED BY THE FUNDS AVAILABLE FOR SALARIES OR BY SPECIFIC STATUTES, AND IN SOME INSTANCES THE STAFF HAS BEEN OR WILL BE DRASTICALLY REDUCED. THE REAL PROBLEM CONFRONTING MANY FOOD AND DRUG OFFICIALS TODAY, IS NOW, WITH THE SAME OR WITH A SMALL STAFF, THEY CAN INCREASE THE EXTENT AND EFFECTIVENESS OF THEIR SERVICES. MORE WORK, HARDER WORK AND ESPECIALLY MORE EFFECTIVE WORK, IS THE ONLY SOLUTION. IF THERE ARE ON THE STAFF ANY WHO LACK ENTHUSIASM FOR HARD, EFFECTIVE WORK, THEY SHOULD BE REPLACED

SPEEDILY BY SOME OF THOSE HIGH GRADE MEN WHO ARE NOW EAGERLY SEEKING A CHANCE TO WORK.

THE KEEN INTEREST FELT BY MOST FOOD AND DRUG OFFICIALS IN THE ACHIEVEMENT OF RESULTS OF BENEFIT TO THE INDUSTRIES AND OF INESTIMABLE VALUE TO CONSUMERS, IS ALL THE INCENTIVE NEEDED TO SPUR THEM TO DO THEIR UTMOST TO MEET THE EXISTING EMERGENCY. THE OPPORTUNITY OF THE FOOD AND DRUG OFFICIAL TO RENDER EDUCATIONAL SERVICE TO THE FOOD, DRUG AND COSMETIC INDUSTRY IS NOT ALWAYS FULLY REALIZED EITHER BY THE INDIVIDUALS IN THE INDUSTRY OR BY THE OFFICIAL, SINCE IT IS INCIDENTAL TO HIS CHIEF FUNCTION OF APPLYING THE POWERS OF THE STATE TO PROTECT THE PUBLIC FROM ADULTERATED AND MISBRANDED ARTICLES.

THE MAN IN THE INDUSTRY MAY HAVE HIS EYE SO RIVETED ON THE BIG STICK IN THE HANDS OF THE ENFORCEMENT OFFICIAL, THAT HE FAILS TO HEAR OR NEED THE GENTLE VOICE OF INSTRUCTION, WHICH IF FOLLOWED, WOULD MAKE THE USE OF THE STICK WHOLLY UNNECESSARY. KEEPING THE INDUSTRY FULLY INFORMED OF THE REQUIREMENTS OF THE LAW AND REGULATIONS, SO THAT THE MAN WHO INTENDS TO COMPLY MAY DO SO WITH THE LEAST POSSIBLE EXPENSE AND INCONVENIENCE, IS THE OBVIOUS DUTY OF THE FOOD AND DRUG OFFICIAL. HOWEVER, THAT OFFICIAL WHO STOPS WITH THE PERFORMANCE OF THAT PART OF HIS EDUCATIONAL WORK, IS NEGLECTING A SPLENDID OPPORTUNITY TO RENDER A GREAT SERVICE TO THE INDUSTRY AND TO THE CONSUMING PUBLIC, AS WELL AS TO INCREASE THE EFFICIENCY OF HIS LAW ENFORCEMENT WORK.

THE FOOD AND DRUG OFFICIAL, BECAUSE OF HIS CLOSE ASSOCIATION WITH THE SCIENTIFIC INVESTIGATORS AND TECHNICAL EXPERTS OF HIS OWN STAFF AND OF OTHER SCIENTIFIC AND TRADE ORGANIZATIONS, IS IN A POSITION TO DEVELOP NEW, AND VALUABLE INFORMATION REGARDING THE BEST PROCESSES FOR MANUFACTURING, STORING, SHIPPING AND HANDLING ARTICLES, INFORMATION OF WHICH MANY IN THE INDUSTRY ARE IN SORE NEED. THE OFFICIAL MAY BECOME A CENTER FROM WHICH RADIATES IDEAS BASED ON THE MOST RECENT AND SCIENTIFIC DEVELOPMENTS IN FOOD AND DRUG TECHNOLOGY AND BRING ABOUT IMPROVEMENTS IN THE INDUSTRY WHICH NEVER COULD BE EFFECTED BY LEGAL ACTION ALONE.

THE INSPECTOR WHO BRINGS ABOUT A CONTACT BETWEEN THE TECHNICAL EXPERT WITH PRACTICAL IDEAS AND THE MANUFACTURER WITH PRESSING TECHNOLOGICAL PROBLEMS, RESULTING IN A MORE EFFICIENT OR MORE ECONOMICAL METHOD OF MANUFACTURE OR OF MARKETING, WILL FIND THAT HE HAS GAINED, IN ADDITION TO THE SATISFACTION THAT COMES FROM THE CONSCIOUSNESS OF HAVING MADE THE MOST OF HIS OPPORTUNITIES, A WARM WELCOME WHEN HE RETURNS TO MAKE A RE-INSPECTION AND HE HAS OPENED UP SOURCES OF INFORMATION THAT WOULD FOREVER REMAIN CLOSED TO THE MAN WHO NEGLECTED TO UTILIZE SUCH AN EFFECTIVE BASIS FOR MUTUAL CONFIDENCE. FURTHERMORE, HE GAINS THE WHOLE-HEARTED SUPPORT OF THE BETTER ELEMENT IN THE INDUSTRY WHEN IT BECOMES NECESSARY FOR HIM TO APPLY THE POWER OF THE BIG STICK TO BRING IN LINE THE INDIVIDUAL WHO DELIBERATELY ADULTERATES OR MISREPRESENTS.



## OUTLOOK FOR THE CONQUEST OF GONORRHEA

FOR AGES THE PROBLEM OF GONORRHEA HAS BEEN BAFFLING BOTH FROM THE POINT OF VIEW OF TREATMENT AND THAT OF PUBLIC HEALTH CONTROL. ONE OF THE OLDEST AND MOST WIDELY-SPREAD INFECTIONS, ITS TREATMENT HAS BEEN EXTREMELY HAPHAZARD AND LARGE-LY INEFFECTIVE. IT IS NOW WELL KNOWN THAT THE THEORY OF TREATMENT WHICH SO LONG PREVAILED, THAT OF SEEKING TO KILL THE GONOCOCCUS UPON AND WITHIN THE TISSUES WAS FUTILE, THAT IT COULD NOT BE DONE WITHOUT DESTROYING THE TISSUES THEMSELVES, AND THAT THE VIGOROUS MEASURES SO LARGE-LY PURSUED DID HARM MORE OFTEN THAN GOOD. THEY SERVED TO AGGRAVATE THE DISEASE AND EXTEND IT TO THE COMPLEX OF POST-URETHRAL STRUCTURES IN THE MALE WHERE IT TOOK ON A LONG CHRONIC AND DAMAGING COURSE. IN WOMEN, THE DISEASE HAS BEEN EXCEPTIONALLY DAMAGING AND ITS TREATMENT MOST UNSATISFACTORY.

IN RECENT YEARS MORE RATIONAL TREATMENT MEASURES CAME TO PREVAIL AMONG MANY SPECIALISTS AT LEAST. IT BECAME ACCEPTED THAT THE BEST WE CAN DO IS TO ENCOURAGE THE HUMAN BODY TO DEVELOP ITS OWN DEFENSIVE MECHANISM AGAINST THE GONOCOCCUS. IN THE MAIN THIS REQUIRED THE USE OF THE SAME REMEDIES IN MUCH WILDER STRENGTH AND MUCH MORE GENTLE HANDLING OF THE TISSUES, FREE FROM IRRITATING OR BRUISING INSTRUMENTATION DURING THE ACUTE STAGE OF THE DISEASE. SUCH MEASURES BROUGHT MORE UNIFORMLY GOOD RESULTS, LIMITING THE INFECTION MORE OFTEN TO THE ANTERIOR URETHRA IN THE MALE. BUT AT BEST IT STILL REQUIRED SIX WEEKS TO SIX MONTHS TO ASSURE A CURE. HENCE, SINCE GONORRHEA REMAINS INFECTIOUS UNTIL DEFINITELY CURED, THE PUBLIC HEALTH CONTROL OF GONORRHEA REMAINED A BAFFLING PROBLEM.

THE ADVENT OF THE SULFONAMIDES HAS BROUGHT A MORE HOPEFUL OUTLOOK. IN VIEW OF THEIR APPARENT EFFECTIVENESS IN A VARIETY OF INFECTIONS, DR. WILLIAM JAMES, HEAD OF THE GENITO-URINARY SECTION, ABLY ASSISTED BY DR. LAWRENCE SUTTON, PROMPTLY UNDERTOOK EXPERIMENTATION WITH THESE NEW THERAPEUTIC AGENTS IN THE TREATMENT OF GONORRHEA. THE FASCINATING STORY OF THIS DEVELOPMENT IS TOO LONG TO TELL FULLY IN THIS REPORT. SUFFICE IT TO SAY THAT THE FAVORABLE RESULTS REPORTED FROM MANY SOURCES HAVE BEEN BORNE OUT HERE.

THE SULFONAMIDES HAVE LAUNCHED US SUDDENLY INTO A NEW ERA IN THE HANDLING OF GONORRHEA, WHICH HOLDS OUT HOPEFUL PROSPECT FOR ULTIMATE CONTROL OF THIS SCOURGE. IT SEEMS PROBABLE THAT IT WILL BE BROUGHT UNDER CONTROL EARLIER THAN SYPHILIS. THE EFFECT OF THESE DRUGS IN THE TREATMENT OF GONORRHEA IS TO REDUCE THE CLINICAL SIGNS OF THE DISEASE, INCLUDING DISCHARGE, TO THE VANISHING POINT WITHIN A VERY FEW DAYS, AND TO BRING ABOUT A CURE IN A VERY LARGE PERCENTAGE OF CASES WITHIN TWO TO THREE WEEKS. SINCE GONORRHEA REMAINS INFECTIOUS UNTIL CURED, THESE RESULTS ARE OF TREMENDOUS SIGNIFICANCE FOR GONORRHEA CONTROL.

AN EXAMPLE IS GIVEN IN THE FOLLOWING TABLE ILLUSTRATING THE RESULTS OBTAINED IN 85 CASES TREATED WITH DISULON (SULFANYLYL-SULFANILAMIDE).

|                               |          |
|-------------------------------|----------|
| NUMBER OF CASES . . . . .     | 85       |
| NEW CASES . . . . .           | 67       |
| OLD CASES . . . . .           | 18       |
| CLINICAL CURE . . . . .       | 80 (94%) |
| FAILURE . . . . .             | 5 (6%)   |
| COMPLICATIONS . . . . .       | 1 (1%)   |
| AVERAGE TIME OF CLINICAL CURE | 10 DAYS  |

UNTIL THE APPEARANCE OF THE MOST RECENT OF THIS CLASS OF DRUGS, SULFATHIAZOLE, AN ADVERSE ELEMENT HAS BEEN A CONSIDERABLE DEGREE OF TOXICITY, BRINGING UNFAVORABLE AND SOMETIMES DANGEROUS REACTIONS IN A CERTAIN PROPORTION OF CASES. THE INDICATIONS SO FAR ARE THAT IN SULFATHIAZOLE WE HAVE A DRUG THAT IS MORE EFFECTIVE, MORE SPEEDY IN ACTION AND MUCH LESS TOXIC THAN ANY OF ITS PREDECESSORS.

TO DATE, 50 CASES TREATED WITH SULFATHIAZOLE HAVE BEEN COMPLETED, IN WHICH 2 FAILURES OCCURRED. ON THE AVERAGE, DISCHARGE CEASED IN TWO DAYS AND THE URINE CLEARED IN SIX DAYS. NO TOXICITY HAS BEEN NOTED.

THE OUTLOOK FOR A SPEEDY CURE OF GONORRHEA AND FOR ITS ULTIMATE ERADICATION SEEMS HOPEFUL.

IN THE USE OF THESE DRUGS RELIABLE LABORATORY TESTS OF CURE BECOME IMPERATIVE. THE COMMON MICROSCOPIC EXAMINATION OF SMEARS IS KNOWN TO BE FAR FROM RELIABLE, ESPECIALLY IN WOMEN. THROUGH THE GENEROUS AID OF THE STATE DEPARTMENT OF HEALTH, A TRAINED PERSON AND EQUIPMENT FOR THE LABORATORY CULTURE OF THE GONOCOCCUS IS NOW BEING PROVIDED. THIS WILL AID GREATLY TOWARD INCREASED SCIENTIFIC PROCEDURE IN GENITO-URINARY WORK.



# FLUOROSCOPE EXAMINATION OF DOMESTIC EMPLOYEES

THE EXAMINATION OF DOMESTICS HAS PROVEN TO BE ONE OF THE FINEST PRACTICAL PROCEDURES, BY ROUTINE BLOOD TESTS, IN OUR CAMPAIGN AGAINST VENEREAL DISEASE. THE RECORDS, HOWEVER, HAVE SHOWN FEW CASES OF TUBERCULOSIS DETECTED. IN VIEW OF THE FACT THAT A LARGE PART OF THE DOMESTIC GROUP, PARTICULARLY DAY WORKERS, ARE IN THE LOWER ECONOMIC BRACKET, IT IS REASONABLE TO PRESUME THAT MANY CASES OF TUBERCULOSIS MUST HAVE BEEN OVERLOOKED.

TO CORRECT THIS SITUATION, FLUOROSCOPE EQUIPMENT WAS SECURED AND A CLINIC PHYSICIAN, DR. CARY-BELLE MENLE, FLUOROSCOPE AND X-RAY SPECIALIST, WAS APPOINTED BEGINNING OCT. 1, 1939, TO SUPPLEMENT THE PHYSICAL EXAMINATION WITH ROUTINE FLUOROSCOPING. THE YEAR 1940 WAS THE FIRST FULL YEAR WITH THAT ARRANGEMENT.

DURING THE YEAR, A TOTAL OF 5,893 APPLICANTS, PRACTICALLY ALL FEMALES, WERE EXAMINED FLUOROSCOPICALLY. THE AGES RANGED FROM 16 TO 65 YEARS, MOSTLY 20 TO 50; 1,692 WERE WHITE, 4,201 COLORED. AN AVERAGE OF 41 PATIENTS WERE EXAMINED IN EACH TWO HOUR PERIOD.

RADIOLOGICAL EVIDENCE OF A TUBERCULOUS INFECTION WAS SHOWN BY 607 INDIVIDUALS.

AN OUTSTANDING FEATURE WAS THE GREAT NUMBER OF CARDIAC LESIONS ENCOUNTERED. THIS BECOMES MORE PRONOUNCED WHEN IT IS REMEMBERED THAT ONLY THE MORE OBVIOUS CARDIAC LESIONS ARE EVIDENT IN A RAPID SURVEY OF THIS TYPE.

WHEN TUBERCULOSIS WAS SUSPECTED, THE APPLICANT WAS REFERRED TO THE TUBERCULOSIS CLINIC, WHERE THE FOLLOW-UP FACILITIES COMPEL PROPER ATTENDANCE. WHEN OTHER CONDITIONS REQUIRING MEDICAL ATTENTION WERE FOUND, THE APPLICANT WAS REFERRED TO HER PRIVATE PHYSICIAN OR TO THE APPROPRIATE CLINIC, AS FOLLOWS:

|                |     |               |    |
|----------------|-----|---------------|----|
| TUBERCULOSIS - | 77  | TUMOR -----   | 12 |
| CARDIAC -----  | 69  | OBESITY ----- | 2  |
| VENEREAL ----- | 215 |               |    |

REFERRALS TO THE TUBERCULOSIS CLINIC FOR THE PAST THREE YEARS HAVE BEEN AS FOLLOWS:

|                | 1938 | 1939<br>JAN-SEP | 1939<br>OCT-DEC | 1940 |
|----------------|------|-----------------|-----------------|------|
| EXAMINATIONS   | 9053 | 7153            | 2217            | 9180 |
| FLUOROSCOPED   | 0    | 285             | 1339            | 5893 |
| REFERRED TO    | 260  | 221             | 16              | 77   |
| T.B. CLINIC    |      |                 |                 |      |
| REFUSED HEALTH | 0    | 1               | 8               | 27   |
| CARD OR GIVEN  |      |                 |                 |      |
| TEMPORARY CARD |      |                 |                 |      |

IT WILL BE NOTED THAT THE YEAR 1939 HAS BEEN REPORTED IN TWO PARTS. THIS WAS DONE BECAUSE ROUTINE FLUOROSCOPY WAS INTRODUCED OCT. 1ST, 1939. DURING THE 21 MONTHS PREVIOUS TO THIS, ONE APPLICANT OUT OF A TOTAL OF 16,206 WAS FOUND TO HAVE TUBERCULOSIS. IN THE FIFTEEN MONTHS DURING WHICH LARGE-SCALE FLUOROSCOPY WAS PRACTICED, THERE WERE 11,397 EXAMINATIONS AND 35 CASES WERE DISCOVERED. IN ADDITION, THE REFERRALS TO THE TUBERCULOSIS CLINIC FELL FROM 481 TO 93. IN TERMS OF PERCENTAGE, THE EFFICIENCY OF DIAGNOSIS ROSE FROM 0.2% TO 37.6% UPON THE INTRODUCTION OF FLUOROSCOPY.

THE 93 CASES REFERRED TO THE TUBERCULOSIS CLINIC WERE NOT ALL SUSPECTED OF HAVING TUBERCULOSIS, BUT INCLUDED SUCH CONDITIONS AS ENLARGED HILAR NODES, CYSTIC LUNG AND PNEUMONIA. ONLY IN THE TUBERCULOUS INDIVIDUALS WERE HEALTH CARDS LIMITED, OR REFUSED. ON FOUR OCCASIONS, TUBERCULOUS PATIENTS ATTEMPTED TO OBTAIN HEALTH CARDS, AND WERE STOPPED WHEN THE FLUOROSCOPIC EXAMINATION REVEALED THE LUNG LESIONS.

THAT TUBERCULOSIS IS PRESENT IN SUPPOSEDLY HEALTHY INDIVIDUALS HAS BEEN REPEATEDLY DEMONSTRATED. MANY APPLICANTS FOUND TUBERCULOUS APPEARED TO BE IN EXCELLENT HEALTH.

ACTIVE TUBERCULOSIS, EVEN IN ADVANCED STAGES, MAY EXIST WITHOUT PRODUCING SUFFICIENT CHANGES IN THE PHYSICAL SIGNS TO BE EVIDENT TO EVEN THE MOST EXPERIENCED EXAMINER. THIS FAILURE CANNOT BE LAID TO THE LACK OF SKILL OF THE PHYSICIAN, BUT RATHER TO HIS LACK OF JUDGMENT IN PLACING RELIANCE UPON A METHOD THAT HAS BEEN PROVEN TO BE INADEQUATE. OF THE 27 PATIENTS UNDER OBSERVATION IN THE TUBERCULOSIS CLINIC, 15 GAVE NO ABNORMAL PHYSICAL SIGNS. INCLUDED IN THIS GROUP ARE PATIENTS WITH ADVANCED TUBERCULOSIS, WITH CAVITY FORMATION.

THE ACCURACY OF THE FLUOROSCOPIC EXAMINATION IS DIFFICULT TO PROVE WITHOUT CORROBORATIVE FILMS. LAWRASON BROWN FOUND THE X-RAY FILM TO BE 99% DIAGNOSTIC. THE FLUOROSCOPE DOUBTLESS DOES NOT EQUAL THIS, BUT IF PROPERLY USED, IT APPROACHES IT CLOSELY. SMALL APICAL LESIONS MAY ESCAPE DETECTION, IF THE REMAINDER OF THE APEX IS WELL AERATED. THE LESIONS THAT HAVE BEEN HERE DETECTED AND PERMANENTLY RECORDED ON X-RAY FILMS HAVE OFTEN BEEN OF SUCH SMALL EXTENT, AND POOR DENSITY, AS TO POINT TO A DIAGNOSTIC ACCURACY OF AT LEAST 97% OR 98%.

THE RESULTS OF THE EXAMINATIONS SHOW THAT, UNDER THE PROPER CONDITIONS, THE FLUOROSCOPE IS A RELIABLE MEDIUM FOR THE DIAGNOSIS OF PULMONARY TUBERCULOSIS. THE PROPER CONDITIONS INCLUDE, A FULLY DARKENED ROOM, MORE THAN TEN MINUTES EYE ACCOMMODATION FOR THE OPERATOR, A SENSITIVE SCREEN, SHUTTERS THAT ARE USED, AND SUFFICIENT VENTILATION.

THE FLUOROSCOPIC EXAMINATION HAS BEEN FITTED INTO THE ROUTINE OF THE GENERAL EXAMINATION, AND IT HAS BEEN POSSIBLE TO EXAMINE THIS GROUP ONCE A YEAR. IN VIEW OF THE RAPIDITY OF DEVELOPMENT OF TUBERCULOSIS IN THE YOUNG, IT SEEMS DESIRABLE TO EXAMINE INDIVIDUALS UNDER TWENTY-FIVE AT LEAST TWICE A YEAR. THERE HAS BEEN LITTLE CORRELATION BETWEEN THE PHYSICAL SIGNS AND THE FLUOROSCOPIC FINDINGS IN LUNG LESIONS. THE MAJORITY OF THOSE WITH ABNORMAL PHYSICAL SIGNS SHOWED NORMAL SCREEN FINDINGS, WHILE SOME OF THE MOST ADVANCED

LESIONS WERE IN INDIVIDUALS WHO SHOWED NEITHER RALES, DULLNESS, NOR CHANGES IN THE BREATH SOUNDS. THE CLINICIAN WAS ABLE TO DETECT SOME CONDITIONS THAT THE FLUOROSCOPIST COULD NOT, SUCH AS BRONCHITIS AND FRICTION RUBS, AND THE FLUOROSCOPIST DETECTED MANY CONDITIONS THAT WOULD NOT HAVE BEEN FOUND CLINICALLY. BOTH PROCEDURES ARE IMPORTANT IN THE GENERAL HEALTH EXAMINATION, AND NEITHER COULD BE OMITTED WITHOUT SERIOUSLY DECREASING THE EFFICIENCY OF THE EXAMINATION.

PATHOLOGICAL CONDITIONS NOTED IN THE COURSE OF FLUOROSCOPIC CHEST EXAMINATIONS OF DOMESTICS

YEAR - 1940

|                                   | TOTAL | WHITE | COLORED |
|-----------------------------------|-------|-------|---------|
| <b>LUNGS</b>                      |       |       |         |
| TUBERCULOSIS - ADVANCED - - - - - | 7     | 1     | 6       |
| FIBROTIC AND CALCIFIC - - - - -   | 576   | 234   | 342     |
| PRIMARY - - - - -                 | 4     | 2     | 2       |
| MINIMAL - - - - -                 | 14    | 0     | 14      |
| MODERATELY ADVANCED - - - - -     | 6     | 3     | 3       |
| INCREASED MARKINGS - - - - -      | 56    | 20    | 36      |
| EMPHYSEMA - - - - -               | 15    | 11    | 4       |
| BRONCHOPNEUMONIA - - - - -        | 1     | 1     | 0       |
| CYSTIC LUNG - - - - -             | 1     | 0     | 1       |
| ENLARGED HILI - - - - -           | 13    | 6     | 7       |
| AZYGOUS LOBE - - - - -            | 3     | 0     | 3       |
| THICKENED PLEURA - - - - -        | 17    | 6     | 11      |
| UNDETERMINED - - - - -            | 3     | 1     | 2       |
| <b>HEART</b>                      |       |       |         |
| CONGENITAL - - - - -              | 4     | 2     | 2       |
| RHEUMATIC - - - - -               | 51    | 15    | 36      |
| HYPERTENSIVE )                    |       |       |         |
| LUETIC ) - - - - -                | 268   | 59    | 209     |
| WIDENED AORTA - - - - -           | 555   | 130   | 425     |
| ANEURISM AORTA - - - - -          | 5     | 1     | 4       |
| ANEURISM INNOMINATE - - - - -     | 2     | 0     | 2       |
| CALCIFIED PERICARDIUM - - - - -   | 1     | 0     | 1       |
| MEDIASTINUM (THYROID) - - - - -   | 16    | 9     | 7       |
| <b>CHEST WALL</b>                 |       |       |         |
| MARKED SCLIOSIS - - - - -         | 14    | 8     | 6       |
| <b>RIBS</b>                       |       |       |         |
| SYNOSTOSIS - - - - -              | 1     | 0     | 1       |
| GUMMATA - - - - -                 | 2     | 0     | 2       |
| TUMOR - - - - -                   | 1     | 0     | 1       |
| OLD FRACTURE - - - - -            | 1     | 1     | 0       |
| CERVICAL - - - - -                | 17    | 3     | 14      |
| <b>DIAPHRAGM</b>                  |       |       |         |
| LIMITED MOTION - - - - -          | 1     | 0     | 1       |
| ELEVATION - - - - -               | 3     | 1     | 2       |
| ADHERIONS - - - - -               | 40    | 13    | 27      |
| FOREIGN BODY - - - - -            | 1     | 0     | 1       |

## GENERAL MORTALITY

CRUDE RATE  
11.7 PER 1,000

THERE WERE 5,025 DEATHS DURING 1930, MAKING A CRUDE DEATH RATE OF 11.7 PER THOUSAND POPULATION. ALTHOUGH THIS WOULD INDICATE A MARKED INCREASE COMPARED WITH THE RATE FOR 1939 WHICH WAS 0.6, IT IS NOT ACTUALLY SO GREAT. MUCH OF THE INCREASE WAS DUE TO THE CHANGE IN POPULATION SHOWN BY THE GOVERNMENT CENSUS WHICH WAS 429,000, WHEREAS OUR 1939 ESTIMATE HAD BEEN 459,000. ON THE SAME POPULATION BASIS, THE INCREASE WOULD HAVE BEEN FROM 10.6 TO 0.9, OR TO PUT IT ANOTHER WAY AN OLD RATE CENSUS FIGURE FOR 1939 WOULD HAVE MADE THE RATE FOR THAT YEAR NOT 0.6 BUT 1.3, COMPARED WITH 11.7 FOR 1940. ACTUAL DEATHS INCREASED FROM 4,855 TO 5,025, AN INCREASE OF 170.

A STUDY OF THE DEATHS BY AGE SHOWS THAT THE INCREASE WAS ALMOST ENTIRELY IN THE GROUP FROM 45 TO 64. IN THAT AGE-BRACKET DEATHS INCREASED FROM 1777 IN 1939 TO 1934 IN 1940 (157 MORE). INCIDENTALLY THE 1939 FIGURE FOR THAT GROUP REPRESENTED 34.5% OF ALL DEATHS WHEREAS THE 1940 FIGURE FORMED 37% OF ALL DEATHS. THERE WERE 1988 DEATHS OVER 65 YEARS OF AGE OR 38% OF THE TOTAL. THIS MEANS THAT 75% OF ALL DEATHS WERE INDIVIDUALS WHO HAD REACHED AT LEAST 45 YEARS OF AGE. THIS IS THE HIGHEST PROPORTION EVER RECORDED, CLEARLY INDICATING THAT PEOPLE AS A GROUP ARE LIVING LONGER. TWENTY-FIVE YEARS AGO ONLY 19% HAD REACHED 65 YEARS OF AGE, COMPARED WITH 38% TODAY AND ONLY 43% REACHED 45 YEARS OF AGE, COMPARED WITH THE PRESENT RATE OF 75%. AS A MATTER OF FACT OF THE 160 INCREASED DEATHS, 120 WERE ORGANIC HEART AND APOPLEXY 57.

THE FOLLOWING ARE THE FIGURES FOR EVERY FIFTH YEAR FROM 1915 TO 1935 AND EACH YEAR THEREAFTER:

### CRUDE DEATH RATES FOR 25 YEARS

| <u>YEAR</u> | <u>POPULATION</u> | <u>CRUDE DEATHS</u> | <u>CRUDE DEATH RATE</u> |
|-------------|-------------------|---------------------|-------------------------|
| 1915        | 375,000           | 5,239               | 14.30                   |
| 1920        | 414,000           | 5,376               | 13.40                   |
| 1925        | 453,000           | 5,172               | 11.67                   |
| 1930        | 440,000           | 5,027               | 11.88                   |
| 1935        | 455,000           | 4,806               | 10.56                   |
| 1936        | 457,000           | 5,108               | 11.20                   |
| 1937        | 458,000           | 5,061               | 11.00                   |
| 1938        | 458,000           | 5,116               | 10.85                   |
| 1939        | 459,000           | 4,855               | 10.58                   |
| 1940        | 429,000           | 5,025               | 11.70                   |

ADJUSTED DEATH RATE  
11.1 PER 1,000.

WITH NEWARK SERVING AS THE HOSPITAL CENTER FOR MANY SMALLER COMMUNITIES, THERE ARE NATURALLY A GREAT NUMBER OF NON-RESIDENT DEATHS. IN 1940 THIS FIGURE WAS 627. DEDUCTING THESE DEATHS AND ADDING 82 KNOWN DEATHS OF NEWARKERS DYING OUT-OF-TOWN, WE FIND AN ADJUSTED TOTAL OF 4762 AND AN ADJUSTED RATE OF 11.1 PER THOUSAND. LARGELY DUE TO THE REDUCED POPULATION FIGURES AND THE STEADY INCREASE IN DEATHS GROUPS, THIS RATE IS AN INCREASE OVER PREVIOUS RECENT YEARS. THE FIGURES AS TO ACTUAL AGE DISTRIBUTION IN 1940 CENSUS WILL NOT BE AVAILABLE FROM WASHINGTON FOR SEVERAL MONTHS.

### ADJUSTED RATES

|         |       |
|---------|-------|
| 1940 -- | 11.10 |
| 1939 -- | 9.56  |
| 1938 -- | 9.80  |
| 1937 -- | 10.05 |
| 1936 -- | 10.30 |
| 1935 -- | 9.69  |
| 1934 -- | 9.69  |
| 1933 -- | 10.34 |
| 1932 -- | 9.70  |

# PRINCIPAL CAUSES OF DEATH

1939

1940

| CAUSE                             | RATE  | DEATHS | RATE  | DEATHS |
|-----------------------------------|-------|--------|-------|--------|
| INFANTILE PARALYSIS - - - - -     | 0.9   | 4      | --    | --     |
| TYPHOID FEVER - - - - -           | --    | --     | --    | --     |
| MEASLES - - - - -                 | --    | --     | 1.2   | 5      |
| SCARLET FEVER - - - - -           | 0.9   | 4      | --    | --     |
| WHOOPING COUGH - - - - -          | 1.3   | 6      | 0.2   | 1      |
| DIPHTHERIA - - - - -              | 0.2   | 1      | 0.2   | 1      |
| INFLUENZA - - - - -               | 2.2   | 10     | 1.9   | 8      |
| EPIDEM. MENIN. (GER.SPIN.) - - -  | 0.2   | 1      | 0.2   | 1      |
| TUBERCULOSIS OF LUNGS - - - - -   | 54.9  | 252    | 64.5  | 277    |
| TUBERCULOSIS MENINGITIS - - - -   | 1.3   | 6      | 2.5   | 11     |
| OTHER TUBERCULOSIS - - - - -      | 4.1   | 19     | 4.9   | 21     |
| CANCER, MALIGNANT TUMOR - - - -   | 137.5 | 631    | 148.2 | 636    |
| SIMPLE MENINGITIS - - - - -       | 3.5   | 16     | 3.3   | 14     |
| APOPLEXY-SOFT. OF BRAIN - - - -   | 83.4  | 383    | 102.6 | 440    |
| ORGANIC HEART DISEASE - - - - -   | 270.4 | 1240   | 317.0 | 1360   |
| BRONCHITIS - - - - -              | 2.0   | 9      | 2.5   | 11     |
| PNEUMONIA, LOBAR - - - - -        | 28.3  | 130    | 21.2  | 91     |
| PNEUMONIA, BRONCHO - - - - -      | 22.0  | 101    | 24.0  | 103    |
| OTHER RESPIRATORY DISEASES - - -  | 27.2  | 124    | 33.1  | 142    |
| STOMACH (CANCER EXCEPTED) - - -   | 8.7   | 39     | 7.2   | 31     |
| DIARRHOEA (UNDER 5 YRS.) - - - -  | 4.4   | 20     | 3.3   | 14     |
| APPENDICITIS & TYPHILITIS - - -   | 13.3  | 61     | 15.8  | 68     |
| HEPATIC, INTEST. OBST. - - - -    | 12.4  | 57     | 13.8  | 59     |
| CIRRHOSIS OF LIVER - - - - -      | 7.8   | 36     | 8.6   | 37     |
| BRIGHT'S DISEASE & NEPHRITIS - -  | 33.5  | 154    | 28.9  | 124    |
| DIS. OF WOMEN (NOT CANCER) - - -  | 2.4   | 11     | 4.4   | 19     |
| PUERPERAL SEPTICAEMIA - - - - -   | 1.1   | 5      | 0.5   | 2      |
| OTHER PUERPERAL DISEASES - - - -  | 4.4   | 23     | 6.3   | 27     |
| CONG. DEBILITY & MALF. - - - -    | 44.2  | 203    | 52.4  | 225    |
| OLD AGE - - - - -                 | 7.8   | 36     | 6.5   | 28     |
| ACCIDENT - - - - -                | 49.2  | 226    | 60.1  | 258    |
| HOMICIDE - - - - -                | 5.2   | 23     | 4.9   | 21     |
| SUICIDE - - - - -                 | 10.9  | 50     | 18.1  | 82     |
| ILL-DEFINED CAUSES - - - - -      | --    | --     | 11.7  | 50     |
| ALL OTHER CAUSES - - - - -        | --    | --     | 242.7 | 1039   |
| OTHER EPIDEMIC DISEASES - - - - - | --    | --     | 0.2   | 1      |

## ORGANIC HEART DISEASE

THE STEADY INCREASE IN ORGANIC HEART DISEASE WHICH HAS CONTINUED THROUGH THE PAST TWENTY YEARS, SHOWED AN EVEN GREATER INCREASE IN 1940 WITH 360 SUCH DEATHS COMPARED WITH 247 DEATHS LAST YEAR, THE HIGHEST UP TO THAT TIME. THIS IS AN INCREASE OF 85% OVER THE FIGURE FOR 1921 WHEN THERE WERE ONLY 510 DEATHS FROM THIS CAUSE. THIS IS ENTIRELY DUE TO THE GREAT PERCENTAGE OF THE POPULATION REACHING OLD AGE. 85% OF THE DEATHS FROM HEART DISEASE IN 1940 WERE OVER 45.

A WIDESPREAD PROGRAM OF PHYSICAL EXAMINATIONS AT 35 TO 45 YEARS OF AGE WOULD UNDOUBTEDLY DETECT MANY EARLY CASES OF HEART DISEASE IN TIME TO INCREASE MATERIALLY THE SPAN OF LIFE.

## APOPLEXY

ANOTHER MAJOR CAUSE OF DEATH WHICH SHOWS THE FIRST REAL INCREASE IN 1939 WITH 383 DEATHS, THE HIGHEST SINCE THE MARKET CRASH OF 1929, SHOWED AN EVEN GREATER INCREASE IN 1940 WITH 440 DEATHS, AN INCREASE OF 15% IN ONE YEAR. AS WITH ORGANIC HEART DISEASE THE BULK OF THE DEATHS (421) WERE OVER 45 AND 254 OVER 65 YEARS OF AGE.

CANCER

THE SECOND HIGHEST CAUSE OF DEATH WAS CANCER WITH 636 DEATHS. THIS CAUSE HAS BEEN STEADILY INCREASING AND IS NOW APPROXIMATELY 25% GREATER THAN THE RATE OF ONLY TEN YEARS AGO. ALTHOUGH 90% OF THE DEATHS WERE OVER 45 YEARS OF AGE, THERE WERE 103 CANCER DEATHS BETWEEN 25 AND 44.

TUBERCULOSIS

71.9 PER 1,000

THERE WERE 109 DEATHS DURING THE YEAR ATTRIBUTED TO TUBERCULOSIS OF ALL FORMS. THIS IS AN INCREASE OF 32 OVER THE FIGURE OF 277 IN 1939, WHICH WAS THE LOWEST EVER RECORDED. A LARGE PART OF THIS INCREASE WAS IN NEGRO DEATHS OF WHICH THERE WERE 139 COMPARED WITH 117 IN 1939. THERE IS NO APPARENT REASON WHY THE SLIGHT INCREASE SHOULD CONTINUE INASMUCH AS CASES REPORTED CONTINUED LOW WITH 586, MAKING FOUR SUCCESSIVE YEARS BELOW 600. ONLY TEN YEARS AGO WE AVERAGED 1003 CASES PER YEAR. THE DROP IS MORE REMARKABLE IN VIEW OF THE THOUSANDS OF ADDITIONAL EXAMINATIONS CARRIED OUT TODAY.

PNEUMONIALOWEST MORTALITY RATE 45.2LOWEST CASE FATALITY RATE 12.3%

UNDOUBTEDLY THE MOST ENCOURAGING MORTALITY STATISTIC FOR 1940 WAS THAT OF PNEUMONIA. THERE WERE 194 DEATHS FROM PNEUMONIA ALL

FORMS AND A RATE OF 45.2 PER 100,000, THE LOWEST IN THE CITY SINCE 1927, OVER FIFTY YEARS. ALTHOUGH SOME OF THIS REDUCTION WAS DUE TO THE FACT THAT THE PRINCIPAL AND ENCOURAGING POINT OF THE FACT THAT ONLY 12.3% OF THE DEATHS WERE FATAL. EVEN ALLOWING FOR A SLIGHTLY INCREASED PROPORTION OF REPORTING, THE DEATH RATE HAS MADE EXCELLENT PROGRESS. A CASE REPORTING FOR MANY YEARS, OUR CASE FATALITY RATE OF 1938 NEVER FELL BELOW 20%.

SERUM WAS PROVIDED FOR 148 CASES AND SULF. PYRIDINE OR SULFATHIAZOLE FOR 1039. AMONG THIS LARGE GROUP ONLY 7.6% PROVED FATAL.

| YEAR | CASES | DEATHS | MORTALITY PER CM | FATALITY RATE | TREATMENT   |
|------|-------|--------|------------------|---------------|---|
| 1937 | 2138  | 429    | 93.7             | 20 %          | NO ORGANIZED PNEUMONIA CAMPAIGN                   |
| 1938 | 1604  | 312    | 68.1             | 19.5 %        | SIX MONTHS USE OF FREE SERUM.<br>NO SULFAPYRIDINE |
| 1939 | 1731  | 231    | 50.4             | 13.3 %        | FULL YEAR OF SERUM AND SULFAPYRIDINE              |
| 1940 | 1577  | 194    | 45.2             | 12.3 %        | FULL YEAR OF SERUM AND CHEMOTHERAPY               |

MATERNAL MORTALITY

THERE WERE 29 PUERPERAL DEATHS DURING THE YEAR, ONE LESS THAN IN 1939. IT IS ENCOURAGING TO NOTE, HOWEVER, THAT SEPTICAEMIA DEATHS DROPPED TO 2, EQUALLING THE LOW RECORD OF 1938.

MATERNAL DEATHS BY CAUSES

|   | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 |
|---|------|------|------|------|------|------|------|
| TOTAL DEATHS - - - - -                          | 39   | 34   | 29   | 22   | 21   | 30   | 29   |
| PUERPERAL SEPTICAEMIA - - - - -                 | 7    | 8    | 6    | 10   | 2    | 5    | 2    |
| ECTOPIC PREGNANCY - - - - -                     | 1    | 2    | 2    | -    | 3    | -    | 2    |
| CAESAREAN OPERATION - - - - -                   | 1    | 2    | 5    | 2    | 3    | 3    | 8    |
| SELF INDUCED ABORTION - - - - -                 | 3    | 5    | -    | -    | 2    | 5    | -    |
| SPONTANEOUS ABORTION - - - - -                  | 2    | 4    | -    | 2    | -    | 3    | -    |
| ECLAMPSIA - - - - -                             | 2    | 3    | 2    | 1    | -    | 2    | 2    |
| OTHER ACCIDENTS OF PREGNANCY - - - - -          | 0    | 4    | 6    | 3    | 4    | 8    | -    |
| PLACENTA PRAEVIA - - - - -                      | 6    | 2    | 2    | 2    | 2    | -    | 2    |
| POST PARTUM HEMORRHAGE - - - - -                | 5    | 3    | 4    | 2    | 2    | 2    | 4    |
| ACCIDENTAL ABORTIONS - - - - -                  | -    | -    | 2    | -    | 3    | -    | 4    |
| SHOCK FORCE OF DELIV. BREECH PRESENT. - - - - - | -    | -    | -    | -    | -    | -    | 3    |
| TOXEMIA PREGNANCY - - - - -                     | -    | -    | -    | -    | -    | -    | 2    |
| MATERNAL MORT. PER 1,000 DELIVERIES             | 5.2  | 4.4  | 3.9  | 2.8  | 2.6  | 3.7  | 3.3  |

## ACCIDENTAL DEATHS

THERE WERE 258 ACCIDENTAL DEATHS IN 1940, AN UNFORTUNATE INCREASE OF 32 OVER 1939 WHICH HAD 226 DEATHS, THE LOWEST IN OVER THIRTY YEARS. IT IS STILL WELL ABOVE THE AVERAGE FOR THE PAST SEVEN YEARS, WHICH IS 31.8. THE GREATEST INCREASE WAS FOR CRANE ASBESTOS BURNS WITH 3, COMPARED WITH ONLY ONE SUCH DEATH IN 1939. THE OTHER BIG INCREASE WAS FOR ILLUMINATING GAS WHICH INCREASED FROM 4 TO 13. THERE WERE 7 DEATHS FROM RAILROAD ACCIDENTS COMPARED WITH ONE IN 1939.

ACCIDENT TABLE 1940

| CAUSE OF ACCIDENT      | TOTALS   |       |        |          |           | MALES    |       |        |          |           | FEMALES  |       |        |          |           |
|------------------------|----------|-------|--------|----------|-----------|----------|-------|--------|----------|-----------|----------|-------|--------|----------|-----------|
|                        | ALL AGES | UND 5 | 5 TO 9 | 10 TO 14 | 15 & OVER | ALL AGES | UND 5 | 5 TO 9 | 10 TO 14 | 15 & OVER | ALL AGES | UND 5 | 5 TO 9 | 10 TO 14 | 15 & OVER |
|                        | 71       | 2     | 5      | 32       | 32        | 58       | 2     | 4      | 27       | 25        | 13       | -     | 1      | 5        | 7         |
|                        | 6        | 6     | -      | -        | -         | 4        | 4     | -      | -        | -         | 2        | 2     | -      | -        | -         |
| ALCOHOLISM             | 7        | -     | -      | 7        | -         | 6        | -     | -      | 6        | -         | 1        | -     | -      | 1        | -         |
| ACCIDENTAL BURNS       | 9        | 2     | -      | 6        | 1         | 7        | 2     | -      | 4        | 1         | 2        | -     | -      | 2        | -         |
| ACCIDENTAL FALLS       | 83       | 4     | -      | 32       | 47        | 57       | 2     | -      | 26       | 29        | 26       | 2     | -      | 6        | 18        |
| AIRPLANE ACCIDENTS     | 1        | -     | -      | 1        | -         | 1        | -     | -      | 1        | -         | -        | -     | -      | -        | -         |
| CRUSHING MACHINERY     | 6        | -     | 1      | 5        | -         | 6        | -     | 1      | 5        | -         | -        | -     | -      | 2        | -         |
| CONSTRUCTION           | 12       | 4     | 2      | 7        | 2         | 8        | 1     | -      | -        | 2         | 5        | -     | -      | 2        | -         |
| CARBON MON. AUTO EXH.  | 1        | -     | -      | 1        | -         | 1        | -     | -      | 1        | -         | -        | -     | -      | -        | -         |
| DROWNING               | 10       | -     | 3      | 3        | 4         | 10       | -     | 3      | 3        | 4         | -        | -     | -      | -        | -         |
| ELEVATOR FALL IN SHAFT | 1        | -     | -      | -        | 1         | 1        | -     | -      | -        | 1         | -        | -     | -      | -        | -         |
| ELECTROCUT ON EX. WIRE | 2        | -     | 1      | 1        | -         | 2        | -     | 1      | 1        | -         | -        | -     | -      | -        | -         |
| HEAT EXHAUSTION        | 2        | -     | -      | 2        | -         | 1        | -     | -      | 1        | -         | 1        | -     | -      | 1        | -         |
| ILLUM. GAS ACCIDENT    | 13       | -     | 1      | 6        | 7         | 8        | -     | -      | 3        | 5         | 5        | -     | -      | 3        | 2         |
| MOTOR CYCLE            | 2        | -     | -      | 2        | -         | 2        | -     | -      | 2        | -         | -        | -     | -      | -        | -         |
| R. R. ACCIDENT         | 7        | -     | -      | 7        | -         | 7        | -     | -      | 7        | -         | -        | -     | -      | -        | -         |
| OTHER ACCIDENT POISON  | 4        | 2     | -      | 1        | 1         | 3        | 1     | -      | 1        | 1         | 1        | 1     | -      | -        | -         |
| OTHER ACCIDENTS        | 20       | 2     | 5      | 10       | 3         | 16       | 2     | 4      | 9        | 1         | 4        | -     | 1      | 1        | 2         |
| TOTALS                 | 258      | 20    | 17     | 123      | 98        | 98       | 14    | 13     | 102      | 69        | 60       | 6     | 4      | 21       | 29        |

## INFANT MORTALITY - 35.1

### A NEW LOW RATE

ONE OF THE HIGH POINTS IN HEALTH ACHIEVEMENT FOR 1940 WAS THE INFANT MORTALITY RATE, WHICH REACHED THE NEW LOW POINT OF 35.1 PER THOUSAND LIVING BIRTHS. THERE WERE 300 DEATHS UNDER ONE YEAR OF AGE IN 1940, AS COMPARED WITH 318 IN 1939. THIS IS THE LOWEST RATE OF THE ENTIRE PERIOD BY WHICH THE RATE HAS BEEN RECORDING APPROXIMATELY 10 DEATHS EVERY FOUR YEARS FOR THE PAST FIFTY-FIVE YEARS. THE RATE WAS 90 IN 1916. IT FIRST FELL BELOW 80 IN 1919, BELOW 70 IN 1929, BELOW 50 IN 1932 AND HAS BEEN BELOW 40 SINCE 1937. IF THE RATE OF 35.1 WERE MAINTAINED, THERE WOULD HAVE BEEN 36 MORE BABIES LIVED DURING 1940, THE MORTALITY RATE OF 25 YEARS AGO PREVENTED THE TOWN FROM HAVING 47 MORE BABIES DIED LAST YEAR.

AS USUAL DEATHS FROM CONGENITAL CONDITIONS FORMED THE BULK OF INFANT DEATHS WITH 241, AND 21 OF THE DEATHS WERE UNDER ONE MONTH DURING WHICH CHILD HAD NO CHANCE TO DEVELOP ANYTHING. THE MOST ACCURATE MEASUREMENT FOR THE REDUCTION IN INFANT MORTALITY IS THE NUMBER OF DEATHS OVER ONE MONTH AND UNDER ONE YEAR OF WHICH THERE WERE 49 LAST YEAR. THIS MAKES A POST NEONATAL RATE OF 10.1, A SHARP REDUCTION OVER 1939 WHEN IT WAS 31.8 AND WHICH IN TURN WAS THE LOWEST SINCE THAT TIME. TWENTY-FIVE YEARS AGO THIS RATE WAS 51.6 COMPARED TO THE PRESENT RATE OF 10.4.

INFANT MORTALITY  
NEO-NATAL AND POST-NEO-NATAL RATES  
RATES PER 1000 LIVING BIRTHS

| YEAR | UNDER ONE MONTH |        | OVER 1 MO. & UND. 1 YR. |        | TOTAL UNDER 1 YR. |        |
|------|-----------------|--------|-------------------------|--------|-------------------|--------|
|      | RATE            | DEATHS | RATE                    | DEATHS | RATE              | DEATHS |
| 1915 | 35.5            | 390    | 49.5                    | 545    | 85.0              | 935    |
| 1916 | 38.0            | 436    | 51.6                    | 590    | 89.6              | 1026   |
| 1917 | 38.9            | 462    | 48.9                    | 573    | 87.8              | 1035   |
| 1918 | 39.3            | 456    | 65.4                    | 757    | 104.7             | 1213   |
| 1919 | 33.1            | 377    | 43.1                    | 485    | 76.2              | 862    |
| 1920 | 38.7            | 454    | 46.0                    | 540    | 84.7              | 994    |
| 1921 | 36.4            | 427    | 35.1                    | 410    | 71.5              | 837    |
| 1922 | 35.3            | 389    | 39.5                    | 433    | 74.8              | 822    |
| 1923 | 36.0            | 400    | 32.0                    | 356    | 68.0              | 756    |
| 1924 | 32.9            | 370    | 32.9                    | 376    | 65.2              | 746    |
| 1925 | 30.9            | 329    | 30.4                    | 417    | 68.7              | 746    |
| 1926 | 35.5            | 371    | 36.4                    | 382    | 71.9              | 753    |
| 1927 | 34.8            | 349    | 28.5                    | 287    | 63.3              | 636    |
| 1928 | 34.8            | 341    | 29.1                    | 285    | 63.9              | 626    |
| 1929 | 31.2            | 311    | 28.4                    | 283    | 59.6              | 594    |
| 1930 | 27.9            | 274    | 24.2                    | 238    | 52.1              | 512    |
| 1931 | 30.0            | 259    | 21.5                    | 231    | 51.5              | 490    |
| 1932 | 25.5            | 224    | 16.7                    | 147    | 42.2              | 371    |
| 1933 | 24.8            | 197    | 20.3                    | 159    | 45.1              | 356    |
| 1934 | 27.2            | 206    | 18.0                    | 136    | 45.2              | 342    |
| 1935 | 32.9            | 251    | 21.7                    | 166    | 54.6              | 417    |
| 1936 | 27.5            | 199    | 18.4                    | 133    | 45.9              | 332    |
| 1937 | 21.8            | 167    | 15.7                    | 120    | 37.6              | 287    |
| 1938 | 24.6            | 195    | 14.5                    | 115    | 39.1              | 310    |
| 1939 | 24.3            | 194    | 13.6                    | 109    | 38.1              | 303    |
| 1940 | 27.7            | 211    | * 10.4                  | * 89   | * 35.1            | 300    |

\* LOWEST EVER



## BIRTH STATISTICS

BIRTH RATE 19.9 PER 1,000  
(ON THE INCREASE)

THERE WERE 8,538 BIRTHS RECORDED IN THIS CITY DURING 1940, A BIRTH RATE OF 19.9 PER 1,000. THIS NUMBER OF BIRTHS WOULD HAVE BEEN A DEFINITE INCREASE EVEN ON OUR FORMER POPULATION FIGURES, AS IT IS 588 MORE THAN IN 1939. IT IS THE HIGHEST RATE IN TEN YEARS AND CONTINUES THE UPWARD TREND WHICH HAS FOLLOWED THE LOW RECORD RATE OF 15.8 IN 1936.

### BIRTHS DATA 1940

TOTAL BIRTHS 8,538  
MALES . . . . 4,417  
FEMALES . . . . 4,121

WHITE 7,493 STILLBIRTHS 206  
COLORED 1,043 ILLEGITIMATE 278  
YELLOW 2

THE INCREASING PROPORTION OF HOSPITAL DELIVERIES CONTINUED DURING THE YEAR, WITH PHYSICIANS DELIVERING EXACTLY THE SAME NUMBER AT HOME (401) BUT WITH MIDWIFE DELIVERIES FALLING TO A NEW LOW RECORD OF .85, WHEREAS HOSPITAL DELIVERIES INCREASED 637 TO 7,952 OR 93%. THE FOLLOWING TABLE CLEARLY SHOWS THIS TREND.

| YEAR | TOTAL BIRTHS | BIRTH RATE | PHYS. CLIN. DEL. AT HOME | HOSPITAL DEL. % | M. WIFE DEL. HOME |
|------|--------------|------------|--------------------------|-----------------|-------------------|
| 1934 | 7,565        | 16.7       | 1,082                    | 5,858           | 625               |
| 1935 | 7,638        | 16.8       | 1,047                    | 6,076           | 515               |
| 1936 | 7,236        | 15.8       | 778                      | 6,025           | 433               |
| 1937 | 7,659        | 16.7       | 603                      | 6,682           | 374               |
| 1938 | 7,936        | 17.3       | 546                      | 7,106           | 283               |
| 1939 | 7,950        | 17.3       | 401                      | 7,315           | 234               |
| 1940 | 8,538        | 19.9       | 401                      | 7,952           | 185               |



## NEGRO HEALTH STATISTICS

IN THE ABSENCE OF FINAL GOVERNMENT FIGURES AS TO CENSUS BY COLOR, WE HAVE CONTINUED THE ESTIMATE OF 45,000 NEGROES IN THIS CITY. IN SPITE OF THIS, THERE WAS AN UNFORTUNATE INCREASE IN DEATH RATE FROM ALL CAUSES WITH 695 DEATHS, MAKING A RATE OF 15.4 FOR 1940 COMPARED WITH 630 DEATHS AND A RATE OF 4.3 IN 1939. A LARGE PART OF THE NEGROES WERE SUFFERING FROM TUBERCULOSIS, 27 MORE, FROM 117 TO 144 AND ORGANIC HEART DISEASE, 20 MORE, FROM 81 TO 101.

A NEGRO MORTALITY RATE OF 15.4 COMPARED WITH 11.3 FOR THE CITY AT LARGE DEFINITELY SHOWS THAT CONSIDERABLE ACCELERATED EFFORTS MUST BE MADE FOR THIS GROUP EVEN BEYOND THOSE POSSIBLE FOR A HEALTH DEPARTMENT. WE REFER, OF COURSE, TO BETTER HOUSING ENVIRONMENT AND ECONOMIC OPPORTUNITY. THE DIFFERENCE IN RATES IS EVEN MORE DISTINGUISHING WHEN IT IS REALIZED THAT THE NEGRO POPULATION IS MUCH YOUNGER IN YEARS THAN THE WHITE. TO ILLUSTRATE THIS, DEATHS 45 YEARS OF AGE AMONG NEGROES WAS 45% OF THE TOTAL COMPARED WITH A RATE OF 75% OVER 45 YEARS OF AGE IN THE CITY AT LARGE. THE DIFFERENCE OVER 65 YEARS OF AGE WAS EVEN GREATER, BEING ONLY 14.3% AMONG NEGROES COMPARED WITH 38% IN THE CITY AT LARGE.

THE TUBERCULOSIS RATE WAS 306.6 PER 100,000 AS COMPARED WITH A WHITE RATE OF 44.0.

PERINATAL MORTALITY AMONG NEGROES WAS ALSO HIGH, WITH 10 DEATHS AMONG 1,043 BIRTHS OR ALMOST 10 PER 1,000 BIRTHS.

### INFANT MORTALITY RATE

DEATHS UNDER ONE YEAR NUMBERED 74 OR A RATE OF 70.9. ALTHOUGH THIS IS LOWER THAN THE 1939 RATE OF 74.6, IT IS HIGHER THAN THE PREVIOUS TWO YEARS WHICH WERE 61.5 AND 62.2.

PNEUMONIA DEATHS NUMBERED 29, A RATE OF 64.4 AND A REDUCTION FROM THE RATE OF 95.4 LAST YEAR. THIS IS PROBABLY DUE ENTIRELY TO THE USE OF SULFAPYRIDINE.

### BIRTH RATE

THERE WERE 1,043 NEGRO BIRTHS DURING THE YEAR, MAKING A RATE OF 23.2 PER 1,000, A SLIGHT INCREASE OVER 1939, WHEN IT WAS 21.9, BUT ABOUT THE SAME AS 1938, WHEN IT WAS 23.3.



## REPORTABLE DISEASES

(SEE REPORT OF COMMUNICABLE DISEASE DIVISION FOR INCIDENCE TABLE)

THE YEAR 1940 SHOWED A GREAT INCREASE IN REPORTABLE DISEASES WITH 17,692 OTHER THAN VENEREAL, COMPARED WITH 8,121 IN 1939. THIS WAS, OF COURSE, TO BE EXPECTED, PART DUE TO AN INCREASED CONTAGION. LEADING THE LIST WAS MEASLES WITH 6,878, Mumps, 3,503, CHICKENPOX, 2,439; WHOOPING COUGH, 1,051, AND SCARLET FEVER, 93. THE LAST TWO, ALTHOUGH PREVALENT, WERE WELL BELOW NORMAL.

### CHILDHOOD DISEASE FATALITY

IN SPITE OF THE INCREASED PREVALENCE OF CHILDHOOD CONTAGION, THE DOWNWARD TREND IN CASE FATALITY WAS CONTINUED, PARTICULARLY IN SCARLET FEVER, MEASLES AND WHOOPING COUGH. ONE OF THESE MAY BE DUE TO DECREASING VIRULENCE OF THE ORGANISMS AND A VERY SMALL PART MAY BE DUE TO IMPROVED TREATMENT TECHNIQUE AND USE OF LONGEVITY SERUM OR VACCINE. WE ARE INCLINED, HOWEVER, TO ATTRIBUTE THE BULK OF THIS DECREASING FATALITY TO INCREASED RESISTANCE ON THE PART OF YOUNG CHILDREN. THIS RESISTANCE, WE BELIEVE, IS THE RESULT OF BETTER HYGIENE AND DIET FROM BIRTH THROUGH SCHOOL AGE. ONE PART CLEARLY REFERS TO THE FACT THAT COD LIVER OIL FOR THE PAST 8 OR 10 YEARS HAS BECOME A ROUTINE PART OF PRACTICALLY EVERY BABY'S DIET RATHER THE EXCEPTION AS IN FORMER YEARS.

### WHOOPING COUGH

THERE WAS ONLY ONE DEATH FROM WHOOPING COUGH AMONG 1,051 CASES AND THE FOLLOWING TABLE SHOWS THE REMARKABLE REDUCTION DURING THE PAST TEN YEARS.

| <u>WHOOPING<br/>COUGH</u> | <u>PERIOD</u> | <u>TOTAL CASES</u> | <u>TOTAL DEATHS</u> | <u>DEATHS PER 100 CASES</u> |
|---------------------------|---------------|--------------------|---------------------|-----------------------------|
|                           | 1918--1923    | 12,780             | 184                 | 15.7                        |
|                           | 1924--1929    | 11,465             | 142                 | 12.3                        |
|                           | 1930--1935    | 11,487             | 77                  | 6.1                         |
|                           | 1936--1938    | 4,499              | 25                  | 5.9                         |
|                           | 1939          | 2,343              | 6                   | 2.6                         |
|                           | 1940          | 1,051              | 1                   | 1.0-                        |

A SINGLE CLINIC STARTED IN 1939, CONTINUED TO VACCINATE AGAINST WHOOPING COUGH AND TO CONDUCT RESEARCH TO DETERMINE THE VALUE OF THE S PROCEEDURE. APPROXIMATELY 700 CHILDREN WERE VACCINATED AND AN EQUAL NUMBER OF UNVACCINATED CHILDREN WERE LISTED AS CONTROLS FOR STUDY AND OBSERVATION. VACCINE WAS ALSO SUPPLIED TO PRIVATE PHYSICIANS FOR 400 ADDITIONAL CHILDREN. AT THE COMPLETION OF THE PRESENT DIPHTHERIA W.P.A. PROJECT IN JANUARY 1941, THE SAME PROJECT PERSONNEL WILL START A CITY-WIDE CAMPAIGN FOR THE MASS VACCINATION AGAINST WHOOPING COUGH OF OUR ENTIRE PRE-SCHOOL POPULATION.

#### MEASLES & SCARLET FEVER

ONLY 5 DEATHS, ALL OF THEM UNDER FIVE YEARS OF AGE, WERE REPORTED OUT OF 6,878 CASES OF MEASLES AND NOT A SINGLE DEATH OCCURRED AMONG 931 CASES OF SCARLET FEVER, ESTABLISHING A NEW AND MOST ENCOURAGING FATALITY RECORD. THE FOLLOWING TABLE SHOWS THE STEADY DOWNWARD TENDENCY IN CASE FATALITY AS IS FOUND IN WHOOPING COUGH.

#### CASE FATALITY (4 YR PERIODS)

| <u>PERIOD</u> | <u>MEASLES</u> |               |                      | <u>SCARLET FEVER</u> |               |                      |
|---------------|----------------|---------------|----------------------|----------------------|---------------|----------------------|
|               | <u>CASES</u>   | <u>DEATHS</u> | <u>CASE FATALITY</u> | <u>CASES</u>         | <u>DEATHS</u> | <u>CASE FATALITY</u> |
| 1916-19       | 19,086         | 234           | 12.3%                | 2,889                | 36            | 12.4%                |
| 1920-23       | 16,663         | 150           | 9.0                  | 4,943                | 95            | 19.2                 |
| 1924-27       | 2,481          | 97            | 7.7                  | 4,584                | 31            | 6.7                  |
| 1928-31       | 12,932         | 68            | 5.2                  | 3,880                | 23            | 5.9                  |
| 1932-35       | 16,367         | 28            | 1.7                  | 3,033                | 10            | 3.3                  |
| 1936-39       | 10,528         | 17            | 1.6                  | 5,347                | 13            | 2.4                  |
| 1940          | 6,878          | 5             | 0.7                  | 930                  | 0             | 0                    |

#### DIPHTHERIA

(NO CASE-NO DEATH)

NEWARK WAS ABSOLUTELY FREE FROM DIPHTHERIA, NOT EVEN A CASE BEING REPORTED DURING THE ENTIRE YEAR 1940. THIS IS A MOST FITTING AND GRATIFYING CLIMAX TO A 12 YEAR CAMPAIGN, NOT ONLY TO BRING DIPHTHERIA UNDER CONTROL, BUT TO SO POPULARIZE IMMUNIZATION THAT THIS FORMERLY DREADED DISEASE OF CHILDREN MAY NEVER AGAIN BECOME A PROBLEM. THE MAJOR PART OF THE DECREASE IN PREVALENCE AND MORTALITY WAS ACCOMPLISHED IN LESS THAN FIVE YEARS, BRINGING IT DOWN FROM AN AVERAGE OF 1,000 CASES AND 50 DEATHS PER YEAR, OR GR TO .931, TO ONLY 43 CASES AND 3 DEATHS FOR THE FULL THREE YEARS OF 1939, 1934 AND 1935.

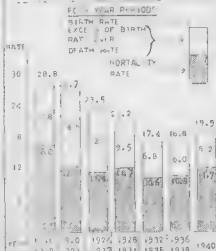
MUCH CREDIT MUST BE GIVEN TO THE W.P.A. DIPHTHERIA PROJECT WHICH STARTED IN 1936 AND HAS MAINTAINED THAT HIGH RECORD OF RESULTS FOR THE PAST FIVE YEARS. WE ARE CONVINCED THAT THIS HAS ADDED MATERIALLY TO THE PUBLIC EDUCATION, WHICH IF CONTINUED, THE CONTROL OF DIPHTHERIA IS ALMOST CERTAIN. AN INDICATION OF THE PUBLIC ACCEPTANCE OF IMMUNIZATION IS SHOWN BY THE INCREASING VISITS TO PRIVATE PHYSICIANS. FIVE YEARS AGO OUR CLINICS IMMUNIZED 6,000 PRE-SCHOOL CHILDREN IN ONE YEAR, WHEREAS PRIVATE PHYSICIANS IMMUNIZED LESS THAN 200. IN 1940 THE DEPARTMENT IMMUNIZED 4,000 IN OUR CLINICS, WHILE PRIVATE DOCTORS TREATED AND ISSUED CERTIFICATES TO MORE THAN 2,000.

#### DIPHTHERIA CASES & DEATHS

| <u>YEAR</u> | <u>CASES</u> | <u>DEATHS</u> | <u>YEAR</u> | <u>CASES</u> | <u>DEATHS</u> |
|-------------|--------------|---------------|-------------|--------------|---------------|
| 1928        | 1364         | 95            | 1934        | 10           | 1             |
| 1929        | 1717         | 96            | 1935        | 12           | 1             |
| 1930        | 873          | 48            | 1936        | 2            | 0             |
| 1931        | 226          | 16            | 1937        | 5            | 1             |
| 1932        | 70           | 2             | 1938        | 23           | 1             |
| 1933        | 21           | 1             | 1939        | 13           | 1             |
|             |              |               | 1940        | 0            | 0             |

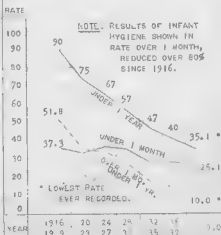
# THE VITAL RATIO

TREND IN BIRTHS AND DEATHS  
CRUDE RATES PER 1000



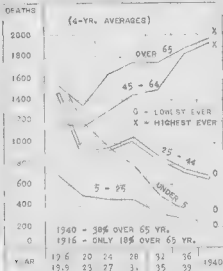
# INFANT MORTALITY

DEATHS UNDER 1 YEAR PER 1000  
LIVING BIRTHS



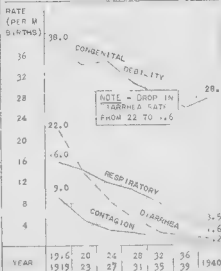
# MORTALITY TREND BY AGE

DEATHS OVER 45 AND 65 INCREASING  
"PEOPLE LIVE LONGER"



# INFANT MORTALITY

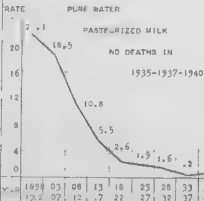
SPECIAL CAUSES  
4-YR. AVERAGES



# TYPHOID FEVER MORTALITY

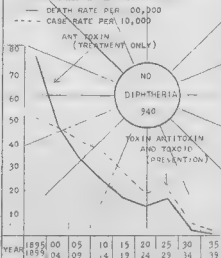
RATE PER 100,000

FIVE-YEAR AVERAGES



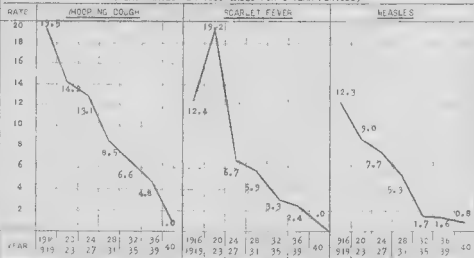
# NO DIPHTHERIA IN 1940

MORTALITY & MORBIDITY  
1895-1939 = 5 YEAR AVERAGES

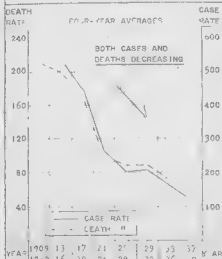


# DOWNWARD TRENDS IN CASE FATALITY

CAUSED BY  
LOWER DISEASE VIRULENCE OR INCREASED RESISTANCE?  
I BELIEVE BETTER NUTRITION AND HYGIENE AMONG INFANTS AND YOUNG CHILDREN IS THE ANSWER.  
(DEATH RATES PER 1000 CASES FOR 4-YEAR PERIODS)



## TUBERCULOSIS MORTALITY &amp; MORBIDITY

DECLINE OF THE "WHITE PLAGUE"  
RATES PER 100,000

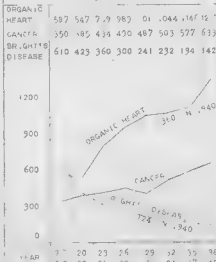
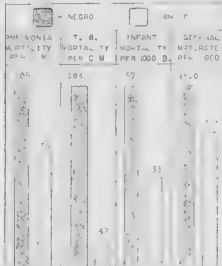
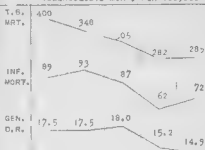
## ORGANIC HEART DISEASE

CANCER

BRIGHT'S DISEASE

MORTALITY TRENDS

DEATHS -- 3-YEAR AVERAGES

MORTALITY BY COLOR  
OUTSTANDING VAR AT ONS  
AVERAGE RATE FOR FOUR YEARS  
1937 - 1940NEGRO MORTALITY  
ENCOURAGING DOWNWARD TRENDS  
1931 - 1940 (2 YR AVERAGE)DEATH RATE - PER 1000  
INFANT MORT. - PER 1000 BIRTHS  
TUBERCULOSIS MORT. PER 100,000

| YEAR | 1931 | 1933 | 1935 | 1937 | 1939 |
|------|------|------|------|------|------|
|      | 1932 | 1934 | 1936 | 1938 | 1940 |

## DEATHS AND DEATH RATES

## BY CAUSE (TOTAL AND NEGRO)

| CAUSE                      | TOTAL |        |       |        | NEGRO |        |       |        |
|----------------------------|-------|--------|-------|--------|-------|--------|-------|--------|
|                            | 1940  |        | 1939  |        | 1940  |        | 1939  |        |
|                            | RATE  | DEATHS | RATE  | DEATHS | RATE  | DEATHS | RATE  | DEATHS |
| INFANTILE PARALYSIS        | NONE  | NONE   | NONE  | NONE   | NONE  | NONE   | NONE  | NONE   |
| TYPHOID FEVER              | NONE  | NONE   | 0.9   | 4      | NONE  | NONE   | NONE  | NONE   |
| EASLES                     | 1.2   | 5      | NONE  | NONE   | 2.2   | 1      | NONE  | NONE   |
| SCARLET FEVER              | NONE  | NONE   | 0.9   | 4      | NONE  | NONE   | 4.6   | 2      |
| WHOOPING COUGH             | 0.2   | 1      | 1.3   | 5      | NONE  | NONE   | 2.3   | 1      |
| DIPHTHERIA                 | NONE  | NONE   | 0.2   | 1      | NONE  | NONE   | NONE  | NONE   |
| INFLUENZA                  | 1.9   | 8      | 2.2   | 10     | 2.2   | 1      | NONE  | NONE   |
| FRID-MAXENIN (CER. SPIN)   | 0.2   | 1      | 0.2   |        | NONE  | NONE   | NONE  | NONE   |
| OTHER EPIDEM. DIS.         | 0.2   | 1      | NONE  | NONE   | 2.2   | 1      | NONE  | NONE   |
| TUBERCULOSIS OF LUNGS      | 64.5  | 277    | 54.9  | 252    | 262.2 | 118    | 229.5 | 101    |
| TUBERCULOSIS MENIN.        | 2.5   | 11     | 1.3   | 6      | 11.1  | 5      | 11.4  | 5      |
| OTHER TUBERCULOSIS         | 4.9   | 21     | 4.1   | 19     | 33.3  | 15     | 25.0  | 11     |
| CANCER, MALIGNANT TUMOR    | 148.2 | 636    | 137.5 | 631    | 97.8  | 44     | 79.5  | 35     |
| SIMPLE MENINGITIS          | 3.3   | 14     | 3.5   | 16     | 6.7   | 3      | 0     | 0      |
| APOPLEXY-SOFT. OF BRAIN    | 102.6 | 440    | 83.4  | 383    | 104.4 | 47     | 100.0 | 44     |
| ORGANIC HEART DISEASE      | 317.0 | 1360   | 270.4 | 1240   | 224.4 | 101    | 184.1 | 81     |
| BRONCHITIS                 | 2.5   | 11     | 2.0   | 9      | 4.4   | 2      | 0     | 0      |
| PNEUMONIA, LOBAR           | 21.2  | 91     | 28.3  | 130    | 42.2  | 19     | 56.8  | 25     |
| PNEUMONIA, BRONCHO         | 24.0  | 103    | 22.0  | 101    | 22.2  | 10     | 38.6  | 17     |
| OTHER RESPIRATORY DIS.     | 33.1  | 142    | 27.2  | 124    | 26.7  | 12     | 17.7  | 21     |
| STOMACH (CANCER EXCEPTED)  | 7.2   | 31     | 8.7   | 39     | 2.2   | 1      | 6.8   | 3      |
| DIARRHOEA (UNDER 5 YRS)    | 3.3   | 14     | 4.4   | 20     | 8.9   | 4      | 4.6   | 2      |
| APPENDICITIS & TYPHILITIS  | 15.8  | 68     | 13.3  | 61     | 13.3  | 6      | 25.0  | 11     |
| HEP. A, INTEST. OBST.      | 13.8  | 59     | 12.4  | 57     | 15.6  | 7      | 13.6  | 6      |
| CIRRHOSIS OF LIVER         | 8.6   | 37     | 7.8   | 36     | 2.2   | 1      | 0     | 0      |
| BRIGHT'S DIS. & NEPHRITIS  | 28.9  | 124    | 33.5  | 154    | 46.7  | 21     | 50.0  | 22     |
| DIS. OF WOMEN (NOT CANCER) | 4.4   | 19     | 2.4   | 11     | 24.4  | 11     | 9.1   | 4      |
| PUERPERAL SEPTICAEMIA      | 0.5   | 2      | 1.1   | 5      | 2.2   | 1      | 2.3   | 1      |
| OTHER PUERPERAL DISEASES   | 6.3   | 27     | 4.4   | 25     | 20.0  | 9      | 15.9  | 7      |
| CONG. DEBILITY & HALF.     | 52.4  | 225    | 42.2  | 203    | 120.0 | 54     | 104.5 | 46     |
| OLD AGE                    | 6.5   | 28     | 7.8   | 36     | 6.7   | 3      | 9.1   | 4      |
| ACCIDENT                   | 60.1  | 258    | 49.2  | 226    | 86.7  | 39     | 61.4  | 27     |
| HOWARD                     | 4.9   | 21     | 5.2   | 23     | 7.8   | 8      | 25.0  |        |
| SUICIDE                    | 18.1  | 82     | 10.9  | 50     | 8.9   | 4      | 4.6   | 2      |
| ILL DEFINED                | 11.7  | 50     | 8.5   | 39     | 15.6  | 7      | 20.5  | 9      |
| ALL OTHER CAUSES           | 242.7 | 1040   | 236.1 | 1083   | 311.1 | 140    | 300.0 | 132    |

## MORTALITY UNDER SPECIAL HEADINGS 1930 TO 1940

|                                | 1932 | 1938 | 1937 | 1936 | 1935 | 1934 | 1933 | 1932 | 1931 | 1930 | 1910 |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| TOTAL - ALL CAUSES             | 5005 | 5116 | 5256 | 5331 | 4996 | 4921 | 5128 | 4850 | 5306 | 5447 | 5207 |
| INFANTILE PARALYSIS - - - -    | -    | -    | 1    | -    | 4    | -    | 2    | -    | 10   | 1    | -    |
| TYPHOID FEVER - - - - -        | 4    | 2    | -    | 1    | -    | 1    | 2    | 4    | 2    | 1    | -    |
| MALARIA - - - - -              | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| SMALLPOX - - - - -             | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MEASLES - - - - -              | -    | -    | 16   | 1    | 11   | 1    | 16   | 2    | 1    | 19   | 5    |
| SCARLET FEVER - - - - -        | 4    | 1    | 1    | 7    | 1    | 2    | 4    | 3    | 9    | 3    | -    |
| DIPHTHERIA - - - - -           | 1    | 1    | 1    | -    | 1    | 1    | 1    | 2    | 16   | 47   | 1    |
| HOOPING COUGH - - - - -        | 6    | 6    | 7    | 2    | 22   | 1    | 6    | 10   | 21   | 10   | 1    |
| INFLUENZA - - - - -            | 10   | 17   | 24   | 21   | 14   | 25   | 33   | 34   | 27   | 14   | 8    |
| EPIDEMIC MENINGITIS (CEREB.SP) | 1    | 2    | 8    | 23   | 3    | 2    | 3    | 4    | 10   | 16   | 1    |
| OTHER EPIDEMIC DISEASES - -    | -    | 1    | -    | -    | 9    | -    | -    | -    | -    | -    | 1    |
| TUBERCULOSIS OF LUNGS - - -    | 252  | 253  | 266  | 311  | 283  | 285  | 336  | 325  | 362  | 378  | 277  |
| TUBERCULOSIS MENINGITIS - -    | 6    | 9    | 10   | 10   | 11   | 10   | 16   | 14   | 16   | 25   | 11   |
| OTHER TUBERCULOSIS - - - -     | 19   | 25   | 25   | 25   | 22   | 21   | 36   | 21   | 32   | 42   | 21   |
| CANCER, MALIGNANT TUMOR - -    | 131  | 130  | 133  | 166  | 153  | 153  | 155  | 181  | 178  | 100  | 136  |
| CELL MENINGITIS - - - - -      | 16   | 29   | 22   | 32   | 25   | 17   | 28   | 22   | 35   | 29   | 1    |
| APOPLEXY - OPENING OF BRAIN    | 383  | 347  | 310  | 358  | 304  | 307  | 304  | 324  | 305  | 304  | 240  |
| ORGANIC HEART DISEASE - - -    | 1240 | 120  | 1158 | 1162 | 1111 | 1082 | 99   | 958  | 980  | 1006 | 1360 |
| BRONCHITIS - - - - -           | 9    | 18   | 13   | 31   | 20   | 18   | 23   | 15   | 31   | 28   | 11   |
| LOBAR PNEUMONIA - - - - -      | 130  | 189  | 245  | 254  | 241  | 224  | 261  | 232  | 307  | 282  | 91   |
| TROUSSEAU PNEUMONIA - - - -    | 101  | 123  | 84   | 165  | 141  | 136  | 12   | 63   | 92   | 169  | 03   |
| OTHER RESPIRATORY DISEASES     | 124  | 92   | 124  | 91   | 94   | 80   | 63   | 93   | 89   | 61   | 142  |
| DISEASES OF STOMACH - - - -    | 39   | 43   | 51   | 34   | 37   | 28   | 38   | 50   | 49   | 54   | 31   |
| DIARRHOEAL DIS. UNDER 5 YRS    | 20   | 12   | 32   | 16   | 24   | 23   | 18   | 16   | 36   | 45   | 14   |
| APPENDICITIS & TYPHILITIS -    | 61   | 82   | 77   | 71   | 58   | 90   | 88   | 95   | 92   | 100  | 68   |
| HERNIA, INTESTINAL OBST. -     | 57   | 51   | 60   | 57   | 47   | 65   | 83   | 50   | 66   | 53   | 59   |
| CIRRHOSIS OF LIVER - - - -     | 36   | 42   | 42   | 35   | 49   | 34   | 27   | 45   | 54   | 44   | 37   |
| GOUTY DISEASE & NEPHRITIS      | 154  | 145  | 168  | 211  | 201  | 227  | 229  | 212  | 224  | 225  | 124  |
| DIS. OF WOMEN (NOT CANCER) -   | 11   | 11   | 12   | 9    | 20   | 13   | 17   | 23   | 12   | 20   | 19   |
| PUERPERAL SEPTICAEMIA - - -    | 5    | 4    | 10   | 6    | 8    | 7    | 5    | 3    | 3    | 16   | 2    |
| OTHER PUERPERAL DISEASES - -   | 25   | 19   | 12   | 23   | 26   | 32   | 22   | 33   | 31   | 44   | 27   |
| CONGENITALITY & MALFORM. -     | 203  | 213  | 70   | 202  | 264  | 222  | 24   | 232  | 275  | 283  | 225  |
| OLD AGE - - - - -              | 36   | 43   | 49   | 45   | 44   | 34   | 50   | 49   | 55   | 44   | 28   |
| ACCIDENTS - - - - -            | 226  | 268  | 343  | 339  | 277  | 294  | 315  | 277  | 318  | 375  | 258  |
| HOMICIDES - - - - -            | 23   | 21   | 37   | 34   | 37   | 26   | 38   | 39   | 44   | 53   | 21   |
| SUICIDES - - - - -             | 50   | 66   | 70   | 68   | 64   | 71   | 84   | 93   | 8    | 72   | 82   |
| ILL-DEFINED CAUSES - - - -     | 39   | 39   | 32   | 44   | 32   | 27   | 37   | 20   | 15   | 28   | 50   |
| ALL OTHER CAUSES - - - - -     | 1083 | 1116 | 1064 | 951  | 957  | 972  | 876  | 1025 | 1053 | 968  | 1039 |
| CRUDE DEATH RATE (1000 POP.)   | 10.6 | 10.9 | 11.0 | 11.2 | 10.6 | 10.5 | 10.9 | 11.4 | 11.9 | 11.7 | 11.7 |

# DEATHS BY AGE GROUP

| YEAR | TOTAL<br>DEATHS | UNDER<br>18 | 1 AND<br>UND 2 | 2 AND<br>UND 5 | TOTAL<br>UND 5 | 5-14 | 15-24 | 25-44 | 45-64  | 65 &<br>OVER |
|------|-----------------|-------------|----------------|----------------|----------------|------|-------|-------|--------|--------------|
| 1916 | 6357            | 1026        | 390            | 405            | 1821           | 254  | 335   | 1197  | 1566   | 1184         |
| 1917 | 6205            | 1038        | 244            | 179            | 1461           | 237  | 340   | 1275  | 1637   | 1255         |
| 1918 | 8484            | 1215        | 433            | 434            | 2082           | 314  | 780   | 2308  | 1754   | 1245         |
| 1919 | 5534            | 862         | 190            | 186            | 1238           | 249  | 345   | 1204  | 1376   | 1122         |
| 1920 | 5551            | 994         | 253            | 192            | 1439           | 220  | 327   | 1041  | 1379   | 1145         |
| 1921 | 4776            | 837         | 136            | 154            | 1107           | 194  | 248   | 910   | 1256   | 1061         |
| 1922 | 5209            | 822         | 198            | 166            | 1186           | 232  | 268   | 925   | 1414   | 1184         |
| 1923 | 5221            | 756         | 163            | 136            | 1055           | 196  | 305   | 872   | 1503   | 1290         |
| 1924 | 5111            | 746         | 130            | 139            | 1015           | 199  | 268   | 975   | 1470   | 1184         |
| 1925 | 5447            | 746         | 132            | 144            | 1022           | 206  | 279   | 1018  | 1640   | 1288         |
| 1926 | 5606            | 753         | 187            | 158            | 1098           | 156  | 277   | 1015  | 1618   | 1442         |
| 1927 | 5296            | 636         | 109            | 112            | 857            | 210  | 277   | 974   | 1724   | 1254         |
| 1928 | 5735            | 626         | 156            | 186            | 968            | 245  | 304   | 1002  | 1794   | 1422         |
| 1929 | 5857            | 594         | 104            | 152            | 850            | 192  | 308   | 1162  | 1768   | 1577         |
| 1930 | 5447            | 512         | 83             | 119            | 714            | 188  | 327   | 1037  | 1788   | 1393         |
| 1931 | 5306            | 490         | 64             | 98             | 652            | 172  | 252   | 1025  | 1747   | 1458         |
| 1932 | 4850            | 371         | 41             | 73             | 485            | 128  | 228   | 890   | 1677   | 1442         |
| 1933 | 5128            | 356         | 68             | 96             | 520            | 141  | 215   | 914   | 1775   | 1563         |
| 1934 | 4921            | 342         | 54             | 54             | 450            | 117  | 192   | 824   | 1779   | 1559         |
| 1935 | 4996            | 417         | 46             | 60             | 523            | 117  | 190   | 864   | 1788   | 1514         |
| 1936 | 5331            | 332         | 45             | 45             | 422            | 116  | 208   | 861   | 1892   | 1832         |
| 1937 | 5256            | 287         | 51             | 61             | 400            | 115  | 202   | 812   | 1877   | 1850         |
| 1938 | 5116            | 310         | 29             | 45             | 384            | 86   | 179   | 751   | 1845   | 1871         |
| 1939 | 5005            | 303         | 23*            | 24*            | 350*           | 97   | 168*  | 704   | 1777   | 1909         |
| 1940 | 5207            | 300         | 26             | 33             | 359            | 55*  | 168*  | 703*  | 1934** | 1988**       |

\* LOWEST EVER

\*\* HIGHEST EVER

"TOTAL DEATHS" INCLUDES ALL DEATHS IN NEWARK BOTH RESIDENT AND NON-RESIDENT AS WELL AS DEATHS OF NEWARKERS AT SOMO AND VERONA.



PERCENTAGE DISTRIBUTION BY AGE PERIODS FROM

PRINCIPAL CAUSES OF DEATH IN NEWARK, N.J. 1940

| CAUSES OF DEATH     | TOTAL DEATHS |     | LND. 5 YEARS |      | 5 TO 24 YEARS |      | 25 TO 44 YEARS |      | 45 TO 64 YEARS |      | 65 AND OVER |      |
|---------------------|--------------|-----|--------------|------|---------------|------|----------------|------|----------------|------|-------------|------|
|                     | DEATHS       | %   | DEATHS       | %    | DEATHS        | %    | DEATHS         | %    | DEATHS         | %    | DEATHS      | %    |
| TOTAL               | 5207         | 100 | 359          | 6.9  | 223           | 4.3  | 709            | 13.5 | 1934           | 37.1 | 1988        | 38.2 |
| MEASLES             | 5            | 100 | 5            | 100  |               |      |                |      |                |      |             |      |
| WHOOPING COUGH      | 1            | 100 | 1            | 100  |               |      |                |      |                |      |             |      |
| DIARRHOEAL DISEASES | 14           | 100 | 14           | 100  |               |      |                |      |                |      |             |      |
| CONGENITAL DEBILITY | 225          | 100 | 225          | 100  |               |      |                |      |                |      |             |      |
| INFLUENZA           | 8            |     | 3            | 37.5 | 1             | 12.5 | 0              | 0    | 1              | 12.5 | 3           | 37.5 |
| PNEUMONIAS          | 195          |     | 35           | 18.0 | 7             | 3.6  | 28             | 14.3 | 61             | 31.3 | 64          | 32.8 |
| BRONCHITIS          | 11           |     | 5            | 45.4 | 0             | 0    | 0              | 0    | 2              | 18.2 | 4           | 36.4 |
| PULMONARY T. B.     | 277          | 100 | 4            | 1.4  | 52            | 18.9 | 117            | 42.2 | 83             | 29.9 | 21          | 7.6  |
| BRIGHT'S DISEASE    | 124          | 100 | 0            | 0    | 5             | 4.0  | 14             | 11.3 | 45             | 36.3 | 60          | 48.4 |
| APOPLEXY            | 440          | 100 | 0            | 0    | 4             | 0.9  | 15             | 3.4  | 167            | 38.0 | 254         | 57.7 |
| VALVULAR HEART DIS. | 1360         | 100 | 2            | 0.1  | 33            | 2.4  | 103            | 7.6  | 537            | 39.5 | 685         | 50.4 |
| ACCIDENTS           | 258          | 100 | 20           | 7.8  | 27            | 10.5 | 50             | 19.4 | 85             | 32.9 | 76          | 29.4 |

## HEALTH FACTS -- 1917 TO 1940

| YEAR | DEATHS<br>UNDER 1 YR. | INFANT<br>MORTALITY | BIRTHS | BIRTH<br>RATE | DIPHTHERIA<br>DEATHS<br>UNDER 5 YR. | T. B.<br>DEATHS | T. B.<br>DEATH RATE | DIPHTHERIA<br>DEATHS | TYPHOID<br>DEATHS | BRIGHT'S DIS.<br>DEATHS | ORG. HEART<br>DEATHS |
|------|-----------------------|---------------------|--------|---------------|-------------------------------------|-----------------|---------------------|----------------------|-------------------|-------------------------|----------------------|
| 1917 | 1031                  | 87.8                | 11824  | 29.1          | 315                                 | 820             | 202.5               | 50                   | 17                | 698                     | 599                  |
| 1918 | 1215                  | 104.7               | 11575  | 27.0          | 331                                 | 798             | 185.6               | 82                   | 15                | 629                     | 633                  |
| 1919 | 862                   | 76.2                | 11297  | 25.7          | 295                                 | 637             | 144.8               | 50                   | 9                 | 504                     | 529                  |
| 1920 | 994                   | 84.7                | 11734  | 28.3          | 244                                 | 540             | 130.4               | 62                   | 8                 | 507                     | 492                  |
| 1921 | 817                   | 71.5                | 11705  | 27.5          | 210                                 | 446             | 104.9               | 44                   | 12                | 477                     | 511                  |
| 1922 | 825                   | 74.8                | 10993  | 25.4          | 167                                 | 428             | 99.1                | 73                   | 12                | 346                     | 640                  |
| 1923 | 756                   | 68.0                | 11110  | 25.3          | 133                                 | 406             | 92.5                | 34                   | 11                | 340                     | 727                  |
| 1924 | 746                   | 65.2                | 11449  | 25.7          | 132                                 | 392             | 87.9                | 39                   | 12                | 399                     | 729                  |
| 1925 | 746                   | 68.7                | 10852  | 24.0          | 29                                  | 378             | 83.4                | 42                   | 5                 | 343                     | 810                  |
| 1926 | 753                   | 71.9                | 10460  | 22.7          | 128                                 | 421             | 91.5                | 21                   | 7                 | 331                     | 948                  |
| 1927 | 634                   | 63.3                | 10010  | 21.5          | 82                                  | 387             | 82.9                | 62                   | 6                 | 266                     | 1019                 |
| 1928 | 626                   | 63.8                | 9802   | 20.7          | 78                                  | 412             | 86.9                | 95                   | 5                 | 298                     | 002                  |
| 1929 | 594                   | 59.6                | 9975   | 20.7          | 52                                  | 441             | 91.8                | 96                   | 5                 | 258                     | 1047                 |
| 1930 | 512                   | 52.3                | 9784   | 22.2          | 45                                  | 445             | 101.0               | 48                   | 1                 | 244                     | 1005                 |
| 1931 | 491                   | 52.3                | 9506   | 21.4          | 36                                  | 412             | 92.4                | 16                   | 2                 | 224                     | 980                  |
| 1932 | 371                   | 42.9                | 8746   | 19.4          | 16                                  | 360             | 80.0                | 2                    | 4                 | 242                     | 958                  |
| 1933 | 356                   | 45.1                | 7897   | 17.6          | 18                                  | 388             | 85.8                | 1                    | 2                 | 228                     | 1091                 |
| 1934 | 342                   | 45.2                | 7565   | 16.7          | 23                                  | 317             | 69.8                | 1                    | 1                 | 227                     | 1082                 |
| 1935 | 417                   | 54.6                | 7638   | 16.8          | 24                                  | 316             | 69.4                | 1                    | 0                 | 201                     | 1118                 |
| 1936 | 392                   | 45.9                | 7236   | 15.8          | 16                                  | 346             | 75.7                | 0*                   | 1                 | 214                     | 1162                 |
| 1937 | 297                   | 37.6                | 7659   | 16.7          | 32                                  | 30              | 65.8                | 0*                   | 0*                | 168                     | 1158                 |
| 1938 | 310                   | 39.1                | 7936   | 17.3          | 12*                                 | 287             | 62.7                | 1                    | 2                 | 149                     | 1201                 |
| 1939 | 303                   | 38.1                | 7950   | 17.3          | 20                                  | 277*            | 60.9*               | 1                    | 4                 | 154                     | 1240                 |
| 1940 | 300                   | 35.1                | 8538   | 19.9          | 14                                  | 309             | 71.9                | 0*                   | 0*                | 124*                    | 1360                 |

\* LOWEST ON RECORD

## MORTALITY TRENDS SINCE 1894

| YEAR | POPULATION | CRUDE DEATH RATE | RATES PER 100,000 |               |            |                          |       |
|------|------------|------------------|-------------------|---------------|------------|--------------------------|-------|
|      |            |                  | SCARLET FEVER     | TYPHOID FEVER | DIPHTHERIA | TUBERCULOSIS (ALL FORMS) |       |
| 1894 | 203,223    | 4,543            | 22.28             | 33.8          | 16.7       | --                       | 246.3 |
| 1895 | 215,725    | 4,615            | 21.37             | 16.2          | 23.2       | 126.6                    | 225.3 |
| 1896 | 225,000    | 4,716            | 20.96             | 7.6           | 20.9       | 96.9                     | 247.4 |
| 1897 | 230,000    | 4,010            | 17.43             | 23.5          | 14.3       | 59.6                     | 223.0 |
| 1898 | 235,000    | 4,303            | 18.30             | 6.4           | 17.4       | 56.6                     | 267.0 |
| 1899 | 240,000    | 3,537            | 18.90             | 14.2          | 25.0       | 51.7                     | 260.0 |
| 1900 | 246,070    | 5,006            | 20.34             | 22.4          | 20.3       | 58.1                     | 274.7 |
| 1901 | 250,000    | 4,806            | 19.22             | 9.2           | 22.8       | 41.2                     | 272.0 |
| 1902 | 255,000    | 4,943            | 19.38             | 18.0          | 18.4       | 41.2                     | 258.8 |
| 1903 | 266,000    | 4,323            | 18.50             | 26.7          | 23.7       | 45.1                     | 269.9 |
| 1904 | 272,000    | 5,378            | 19.77             | 14.1          | 44.7       | 55.1                     | 284.9 |
| 1905 | 283,239    | 5,025            | 17.74             | 15.9          | 14.1       | 38.8                     | 275.7 |
| 1906 | 290,000    | 5,551            | 19.14             | 11.7          | 17.2       | 34.                      | 293.4 |
| 1907 | 300,000    | 5,724            | 19.08             | 13.7          | 23.0       | 31.7                     | 265.7 |
| 1908 | 305,000    | 5,207            | 17.07             | 29.2          | 11.5       | 21.6                     | 260.7 |
| 1909 | 311,000    | 5,529            | 17.77             | 22.5          | 12.5       | 38.8                     | 245.6 |
| 1910 | 347,469    | 5,764            | 16.64             | 11.2          | 12.7       | 29.9                     | 233.7 |
| 1911 | 352,000    | 5,337            | 15.16             | 6.0           | 10.5       | 21.0                     | 200.8 |
| 1912 | 370,000    | 5,423            | 14.65             | 3.0           | 7.0        | 24.6                     | 61.1  |
| 1913 | 380,000    | 5,562            | 14.63             | 6.9           | 7.9        | 28.0                     | 192.9 |
| 1914 | 395,000    | 5,809            | 14.70             | 6.8           | 6.6        | 10.4                     | 71.   |
| 1915 | 375,000    | 5,382            | 14.30             | 1.6           | 2.9        | 13.1                     | 215.5 |
| 1916 | 385,000    | 6,357            | 16.50             | 1.8           | 6.0        | 14.8                     | 203.4 |
| 1917 | 405,000    | 6,205            | 15.30             | 0.7           | 4.2        | 12.3                     | 202.5 |
| 1918 | 430,000    | 8,483            | 19.72             | 2.6           | 3.5        | 19.1                     | 87.6  |
| 1919 | 440,000    | 5,534            | 12.57             | 2.7           | 2.0        | 11.3                     | 44.8  |
| 1920 | 414,216    | 5,551            | 13.40             | 2.9           | 1.9        | 14.9                     | 30.4  |
| 1921 | 425,000    | 4,774            | 11.24             | 5.9           | 2.8        | 10.4                     | 04.9  |
| 1922 | 432,000    | 5,209            | 12.06             | 3.5           | 2.8        | 16.9                     | 99.1  |
| 1923 | 439,000    | 5,221            | 11.67             | 1.1           | 2.5        | 7.7                      | 92.5  |
| 1924 | 446,000    | 5,004            | 11.22             | 1.8           | 2.7        | 8.7                      | 87.9  |
| 1925 | 453,000    | 5,310            | 11.67             | 2.0           | 1.1        | 9.3                      | 83.4  |
| 1926 | 460,000    | 5,450            | 11.85             | 1.5           | 1.5        | 4.6                      | 1.5   |
| 1927 | 467,000    | 5,086            | 10.90             | 2.6           | 1.3        | 13.3                     | 82.9  |
| 1928 | 474,000    | 5,512            | 11.63             | 1.3           | 1.0        | 20.0                     | 86.1  |
| 1929 | 480,000    | 5,632            | 11.74             | 0.8           | 0.6        | 20.0                     | 31.9  |
| 1930 | 440,000    | 5,239            | 11.92             | 0.7           | 0.2        | 10.9                     | 7.1   |
| 1931 | 445,000    | 5,073            | 11.40             | 2.0           | 4.5        | 3.6                      | 92.1  |
| 1932 | 450,000    | 4,682            | 10.40             | 0.7           | 0.9        | 0.5                      | 80.0  |
| 1933 | 452,000    | 4,930            | 10.91             | 0.9           | 0.5        | 0.2                      | 85.8  |
| 1934 | 454,000    | 4,764            | 10.49             | 0.4           | 0.2        | 0.2                      | 84.4  |
| 1935 | 455,000    | 4,996            | 10.56             | 0.2           | 0.0        | 0.2                      | 83.4  |
| 1936 | 457,000    | 5,331            | 11.18             | 1.5           | 0.2        | NONE                     | 75.7  |
| 1937 | 458,000    | 5,061            | 11.00             | 0.2           | 0.0        | 0.2                      | 85.8  |
| 1938 | 458,000    | 4,970            | 10.85             | 0.2           | 0.4        | 0.2                      | 82.7  |
| 1939 | 459,000    | 4,855            | 10.58             | 0.9           | 0.9        | 0.2                      | 80.3  |
| 1940 | 429,000    | 5,025            | 11.71             | NONE          | NONE       | NONE                     | 7.3   |

## GENERAL AND COLORED STATISTICS BY WARDS

NEWARK, N. J. - 1940

| WARD            | POPULATION | DEATHS | CRUDE<br>DEATH RATE | BIRTH | BIRTH<br>RATE | DEATHS<br>NO. & % | INFANT<br>MORT. RATE |
|-----------------|------------|--------|---------------------|-------|---------------|-------------------|----------------------|
| 1               | 26,000     | 204    | 7.8                 | 402   | 15.5          | 19                | 47.3                 |
| 2               | 11,000     | 194    | 17.6                | 142   | 12.9          | 4                 | 28.2                 |
| 3               | 26,000     | 425    | 16.3                | 514   | 19.8          | 30                | 58.3                 |
| 4               | 6,000      | 125    | 20.8                | 71    | 11.7          | 5                 | 70.4                 |
| 5               | 17,000     | 157    | 9.2                 | 239   | 14.1          | 9                 | 37.6                 |
| 6               | 20,000     | 231    | 11.5                | 296   | 14.8          | 14                | 47.3                 |
| 7               | 13,000     | 160    | 12.3                | 225   | 17.3          | 16                | 71.1                 |
| 8               | 28,000     | 441    | 15.6                | 601   | 15.0          | 18                | 30.0                 |
| 9               | 60,000     | 582    | 9.5                 | 766   | 12.8          | 19                | 24.8                 |
| 10              | 19,000     | 141    | 7.4                 | 300   | 15.8          | 10                | 33.3                 |
| 11              | 27,000     | 283    | 10.5                | 402   | 14.9          | 11                | 27.4                 |
| 12              | 21,000     | 158    | 7.5                 | 269   | 12.8          | 12                | 44.6                 |
| 13              | 56,000     | 493    | 8.8                 | 643   | 11.5          | 21                | 32.6                 |
| 14              | 31,000     | 321    | 10.3                | 470   | 15.1          | 26                | 55.3                 |
| 15              | 13,000     | 142    | 10.9                | 170   | 13.1          | 8                 | 47.1                 |
| 16              | 45,000     | 408    | 9.1                 | 514   | 11.4          | 13                | 25.3                 |
| NON-RESIDENT    |            | 627    | --                  | 2514  | --            | 65                | --                   |
| UNKNOWN ADDRESS |            | 115    | --                  | --    | --            | --                | --                   |
| TOTAL           | 429,000    | 5207   | 11.7                | 8538  | 19.9          | 300               | 35.1                 |
| <u>COLORED</u>  |            |        |                     |       |               |                   |                      |
| 1               | 1,500      | 19     | 12.7                | 27    | 18.0          | 0                 | 0                    |
| 2               | 2,200      | 37     | 16.8                | 46    | 20.9          | 2                 | 43.5                 |
| 3               | 14,600     | 265    | 18.1                | 399   | 27.3          | 28                | 70.2                 |
| 4               | 1,100      | 16     | 14.5                | 16    | 14.5          | 1                 | 52.5                 |
| 5               | 1,125      | 16     | 14.2                | 20    | 17.8          | 1                 | 57.0                 |
| 6               | 2,400      | 25     | 10.4                | 60    | 25.0          | 5                 | 41.3                 |
| 7               | 4,700      | 64     | 13.6                | 103   | 24.0          | 12                | 61.9                 |
| 8               | 2,200      | 30     | 13.6                | 40    | 18.2          | 1                 | 25.0                 |
| 9               | 2,600      | 38     | 14.6                | 46    | 17.7          | 1                 | 2.7                  |
| 10              | 1,700      | 16     | 9.4                 | 29    | 17.1          | 1                 | 14.5                 |
| 11              | 1,200      | 16     | 13.3                | 32    | 26.7          | 3                 | 25.8                 |
| 12              | 450        | 2      | 4.4                 | 3     | 6.7           | 0                 | 0                    |
| 13              | 325        | 3      | 9.2                 | 9     | 27.7          | 1                 | 111.1                |
| 14              | 4,000      | 70     | 17.5                | 127   | 31.7          | 8                 | 62.3                 |
| 15              | 3,500      | 29     | 8.3                 | 38    | 10.8          | 4                 | 105.3                |
| 16              | 1,400      | 13     | 9.3                 | 29    | 20.7          | 2                 | 68.9                 |
| NON-RESIDENT    |            | 18     | --                  | 19    | --            | 4                 | --                   |
| UNKNOWN ADDRESS |            | 18     | --                  | --    | --            | --                | --                   |
| TOTAL           | 45,000     | 695    | 15.4                | 1043  | 23.2          | 74                | 70.9                 |

# DOG BITES AND RABIES

| YEAR | PERSONS<br>BITTEN | ANIMALS<br>EXAMINED | POSITIVE<br>CASES | NEGAT VE<br>CASES | PERSONS<br>GIVEN<br>ANTI-RABIC<br>TREATMENT |
|------|-------------------|---------------------|-------------------|-------------------|---|
| 1910 | 210               | 33                  | 21                | 12                | 40  |
|      | 350               | 26                  | 11                | 15                | 26  |
| 1912 | 536               | 43                  | 18                | 25                | 62  |
| 1913 | 612               | 41                  | 15                | 26                | 41  |
| 1914 | 509               | 28                  | 5                 | 23                | 13  |
| 1915 | 566               | 38                  | 3                 | 35                | 3   |
| 1916 | 432               | 14                  | 0                 | 14                | 4   |
| 1917 | 506               | 34                  | 17                | 17                | 31  |
| 1918 | 565               | 19                  | 8                 | 11                | 43  |
| 1919 | 493               | 17                  | 3                 | 14                | 4   |
| 1920 | 465               | 13                  | 2                 | 11                | 4   |
| 1921 | 539               | 16                  | 0                 | 16                | 0   |
| 1922 | 654               | 22                  | 6                 | 16                | 13  |
| 1923 | 955               | 79                  | 23                | 56                | 92  |
| 1924 | 1169              | 73                  | 23                | 50                | 58  |
| 1925 | 1420              | 56                  | 22                | 34                | 42  |
| 1926 | 1159              | 67                  | 23                | 44                | 47  |
| 1927 | 955               | 60                  | 21                | 39                | 29  |
| 1928 | 1365              | 28                  | 7                 | 21                | 8   |
| 1929 | 1522              | 13                  | 0                 | 13                | 1   |
| 1930 | 1602              | 24                  | 4                 | 20                | 9   |
| 1931 | 1855              | 62                  | 20                | 42                | 26  |
| 1932 | 1588              | 94                  | 54                | 40                | 54  |
| 1933 | 1902              | 78                  | 30                | 48                | 32  |
| 1934 | 980               | 53                  | 22                | 31                | 11  |
| 1935 | 900               | 22                  | 0                 | 22                | 0   |
| 1936 | 2256              | 29                  | 0                 | 29                | 2   |
| 1937 | 2296              | 15                  | 0                 | 15                | 2   |
| 1938 | 2936              | 141                 | 86                | 55                | 64  |
| 1939 | 2890              | 118                 | 64                | 54                | 38  |
| 1940 | 2592              | 45                  | 14                | 31                | 9   |

NOTE - THIS TABLE DOES NOT INCLUDE EXAMINATION OF OUT-OF-TOWN DOGS.

FOLLOWING THREE YEARS WITHOUT A SINGLE CASE OF RABIES AMONG NEWARK DOGS. AN OUTBREAK STARTED EARLY IN 1938 AND CONTINUED UNTIL SEPTEMBER 1939. AN EPIDEMIC IN THIS AND OTHER SECTIONS OF THE STATE WAS DECLARED AND A STRICT QUARANTINE ESTABLISHED.

| RECEIPTS                                 | 1934        | 1935        | 1936        | 1937        | 1938        | 1939        | 1940        |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FACTERIAL EXAMINATIONS - - - - -         | 612.90      | 378.40      | 215.40      | 114.00      | 219.00      | 550.50      | 401.50      |
| CHICKEN PERMITS - - - - -                | 299.00      | 301.00      | 95.00       | 162.00      | 198.00      | 186.00      | 172.00      |
| CHICKEN SLAUGHTERHOUSE PERMITS - - - - - | 1740.00     | 1530.00     | 1320.00     | 1220.00     | 1010.00     | 1840.00     | 910.00      |
| FOOD HANDLERS' LICENSES - - - - -        | 36302.00    | 34465.00    | 35205.00    | 14998.00    | .00         | .00         | .00         |
| ICE LICENSES - - - - -                   | 1346.00     | 1307.00     | 1128.50     | 957.00      | 938.00      | 1054.00     | 937.00      |
| MILK LICENSES - - - - -                  | 5626.50     | 5321.00     | 5334.50     | 5432.50     | 5642.00     | 5712.00     | 5686.00     |
| PLUMBING PERMITS - - - - -               | 4702.50     | 4536.00     | 4948.00     | 5026.50     | 4630.50     | 6364.00     | 5795.50     |
| PLUMBING LICENSES - - - - -              | 3010.00     | 2550.00     | 2750.00     | 2121.00     | 2370.00     | 2530.00     | 2460.00     |
| SUNDRIES - - - - -                       | 856.01      | 530.42      | 81.85       | 51.00       | 61.00       | 2,494.21    | 805.31      |
|  | \$54,494.91 | \$51,018.92 | \$51,908.25 | \$31,115.10 | \$16,169.36 | \$20,286.34 | \$18,107.31 |

## DISBURSEMENTS

|                                    |              |              |              |              |             |             |             |
|------------------------------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|
| LABORATORY - - - - SALARIES - - -  | 29371.38     | 25000.08     | 21600.00     | 20000.00     | 20000.00    | 20000.00    | 20000.00    |
| " - - - - SUPPLIES - - -           | 1745.46      | 275.45       | 850.18       | 3275.21      | 720.00      | 2000.00     | 1000.00     |
| DISPENSARY - - - - SALARIES - - -  | 6200.00      | 7337.00      | 736.22       | 7900.00      | 7000.00     | 10000.00    | 10433.27    |
| " - - - - SUPPLIES - - -           | 1911.50      | 1444.50      | 222.78       | 2400.00      | 2000.00     | 2000.00     | 2592.86     |
| VENEREAL - - - - SALARIES - - -    | 33025.73     | 31920.21     | 215.49       | 4770.00      | 5030.00     | 4070.00     | 4215.00     |
| " - - - - SUPPLIES - - -           | 872.27       | 775.88       | 830.22       | 3671.22      | 1750.00     | 2000.00     | 1000.00     |
| SANITARY - - - - SALARIES - - -    | 80872.03     | 75028.88     | 81893.27     | 92327.93     | 92951.30    | 25000.12    | 98934.05    |
| " - - - - SUPPLIES - - -           | 2726.25      | 2986.26      | 3443.27      | 4371.78      | 3006.31     | 5030.32     | 2390.00     |
| DISTRICT DOCTORS - SALARIES - - -  | 10289.33     | 6849.12      | 11185.42     | 2588.32      | 16060.00    | 16487.96    | 22386.23    |
| CHIEF HYGIENE - SALARIES - - -     | 40078.61     | 40572.22     | 15285.24     | 45795.54     | 39330.88    | 42315.27    | 19670.00    |
| " - - - - SUPPLIES - - -           | 5206.77      | 5776.77      | 8396.47      | 7805.47      | 7839.82     | 8687.22     | 9016.00     |
| INFIRMARY - - - - SALARIES - - -   | 3395.28      | 3257.84      | 3437.12      | 3459.92      | 3429.92     | 2911.80     | --          |
| " - - - - SUPPLIES - - -           | 4562.54      | 7224.98      | 6581.24      | 5668.15      | 6923.55     | 5148.79     | 817.57      |
| TUBERCULOSIS - - SALARIES - - -    | 24002.12     | 24346.70     | 23928.38     | 25535.11     | 24759.36    | 26079.16    | 24435.00    |
| " - - - - SUPPLIES - - -           | 231.19       | 296.15       | 387.18       | 215.59       | 394.27      | 594.34      | 407.00      |
| EXECUTIVE - - - - SALARIES - - -   | 35851.15     | 35593.02     | 3802.85      | 4967.23      | 42827.33    | 42286.80    | 49112.00    |
| " - - - - SUPPLIES - - -           | 9769.79      | 11815.38     | 13573.07     | 13919.45     | 2334.09     | 14297.47    | 18435.00    |
| FOOD & DRUG - - - SALARIES - - -   | 75842.62     | 73753.20     | 6043.43      | 62806.79     | 62567.60    | 67237.26    | 70525.00    |
| " - - - - SUPPLIES - - -           | 5972.27      | 6379.24      | 4149.44      | 5130.52      | 3315.47     | 3129.23     | 3378.00     |
| VETERINARY - - - SALARIES - - -    | --           | --           | 24780.46     | 27985.73     | 26572.40    | 28019.12    | 29399.40    |
| " - - - - SUPPLIES - - -           | --           | --           | 1129.83      | 791.95       | 480.50      | 478.87      | 313.82      |
| PLUMBING - - - - SALARIES - - -    | 21575.20     | 24354.00     | 22737.48     | 25338.85     | 22025.83    | 21870.00    | 22887.00    |
| " - - - - SUPPLIES - - -           | 531.25       | 567.00       | 646.20       | 765.13       | 489.40      | 151.20      | 613.00      |
| CONTAGIOUS - - - SALARIES - - -    | 39585.19     | 43014.61     | 47018.24     | 45151.64     | 48892.37    | 18764.27    | 58184.95    |
| " - - - - SUPPLIES - - -           | 3599.50      | 4193.06      | 5268.92      | 4480.67      | 3754.25     | 4715.13     | 375.00      |
| PAROCHIAL SCHOOLS - SALARIES - - - | 19255.14     | 20520.35     | 21620.94     | 23466.75     | 22322.92    | 22302.73    | 2200.00     |
| " - - - - SUPPLIES - - -           | 153.05       | 107.82       | 172.62       | 148.28       | 117.72      | 269.95      | 13.00       |
| OCCUPATIONAL - - - SALARIES - - -  | --           | --           | --           | 11528.81     | 1600.77     | 12796.63    | 22797.00    |
| " - - - - SUPPLIES - - -           | --           | --           | --           | 3746.12      | 10,501.11   | 4415.12     | 566.00      |
| TOTALS                             | \$392,552.01 | \$500,336.01 | \$611,763.18 | \$623,986.20 | \$53,243.79 | \$67,717.71 | \$21,720.95 |

ORGANIZATION  
AND  
RECENT DEVELOPMENT  
OF  
NEWARK'S HEALTH DEPARTMENT

UNDER COMMISSION GOVERNMENT, THE DIRECTOR OF PUBLIC WORKS IS IN IMMEDIATE CHARGE OF THE HEALTH DEPARTMENT, CITY HOSPITAL AND THE VARIOUS WELFARE DEPARTMENTS.

THE FIVE CITY COMMISSIONERS, INCLUDING THE DIRECTOR OF PUBLIC WORKS, ACT AS THE BOARD OF HEALTH WITH POWER TO ADOPT HEALTH ORDINANCES, APPROPRIATIONS, CONFIRM APPOINTMENTS, ETC.

THE HEALTH OFFICER IS EXECUTIVE HEAD, AND LIKE ALL OTHER DEPARTMENT EMPLOYEES, HAS CIVIL SERVICE TENURE OF OFFICE.

THE DEPARTMENT WAS ORGANIZED ABOUT 50 YEARS AGO BUT RAPID DEVELOPMENT STARTED APPROXIMATELY TWENTY-FIVE YEARS AGO.

| DEVELOPMENT                                 | 1910      | 1920      | 1930      | 1940      |
|---|-----------|-----------|-----------|-----------|
| HEALTH EXPENDITURES                         | \$106,500 | \$280,000 | \$506,000 | \$725,000 |
| POPULATION                                  | 347,000   | 414,000   | 442,000   | 429,000   |
| PER CAPITA COST - INCLUDING DISPENSARY      | \$0.31    | \$0.67    | \$1.14    | \$1.63 *  |
| NUMBER OF EMPLOYEES                         | 73        | 157       | 247       | 412       |
| CRUDE DEATH RATE (PER M)                    | 16.6      | 13.4      | 11.92     | 11.68     |
| BIRTH RATE (PER M)                          | 29.6      | 28.3      | 22.2      | 19.9      |
| TYPHOID MORTALITY (PER CM)                  | 12.7      | 1.9       | 0.2       | NONE      |
| DIPHTHERIA MORTALITY (PER CM)               | 29.9      | 14.9      | 10.9      | NONE      |
| SCARLET FEVER MORTALITY (PER CM)            | 11.2      | 12.1      | 0.7       | NONE      |
| TUBERCULOSIS MORTALITY (PER CM)             | 233.7     | 130.4     | 101.1     | 71.9      |
| DIARRHOEA MORTALITY (UNDER 5) (PER CM)      | 107.2     | 35.3      | 10.2      | 3.3       |
| HOOPING COUGH FATALITY (DEATHS PER M CASES) | 19        | 14        | 8         | 1         |
| INFANT MORTALITY (UNDER 1 YR)(PER M BIRTHS) | 123.0     | 84.0      | 52.3      | 35.1      |

\* INASMUCH AS APPROXIMATELY \$ 80,000 IS FOR INDIGENT MEDICAL CARE, BALANCE MAKES PUBLIC HEALTH PER CAPITA -- \$1.27

FOLLOWING TWO PAGES SHOW DIVISIONAL  
PERSONNEL, TYPE OF WORK AND DEVELOPMENT.

| EXECUTIVE<br>DIVISION | YEAR     |          |          |          | 1940 |      |
|-----------------------|----------|----------|----------|----------|------|------|
|                       | 1910     | 1920     | 1930     | 1940     | COST | EMP. |
|                       | \$18,000 | \$40,000 | \$63,000 | \$67,000 | 20   | 22   |
|                       | 7        | 13       |          |          |      |      |

HEALTH OFFICER, CLERKS, MULTIGRAPH OPERATORS, CHAUFFEUR, JANITORS, WATCHMAN, ETC.  
ADMINISTRATION, VITAL STATISTICS, MAINTENANCE, MULTIGRAPHING AND MINEGRAPHING, PUBLICITY, VISUAL EDUCATION.

| SALARY<br>DIVISION | YEAR     |          |          |          | 1940 |      |
|--------------------|----------|----------|----------|----------|------|------|
|                    | 1910     | 1920     | 1930     | 1940     | COST | EMP. |
|                    | \$26,000 | \$54,000 | \$79,000 | \$78,000 | 23   | 40   |
|                    | 25       | 31       |          |          |      |      |

(ONE ASST. HEALTH OFFICER, 2 CHIEFS, 2 CLERKS, 5 MOTOR-CYCLE AND 2 AUTO INSPECTORS AND 28 DISTRICT INSPECTORS.  
ENFORCE SANITATION OF PREMISES, OLD PLUMBING, NOISANCES;  
SUPERVISE FUMIGATION WITH DANGEROUS GASES; ENFORCEMENT OF  
DOMESTIC EMPLOYEE EXAMINATIONS, DOG BITES, ETC.  
(IN 1920) 85,000 INSPECTIONS, 22,000 NOISANCES FOUND  
AND PRACTICALLY ALL ABATED, SUCH AS LACK OF WATER, DEFECTIVE  
TOILETS, INSANITARY CONDITIONS, JAMBUZZED DOGS, ETC.

| PLUMBING<br>DIVISION | YEAR    |          |          |          | 1940 |      |
|----------------------|---------|----------|----------|----------|------|------|
|                      | 1910    | 1920     | 1930     | 1940     | COST | EMP. |
|                      | \$7,000 | \$12,000 | \$22,000 | \$23,000 | 10   | 8    |
|                      | 6       | 6        |          |          |      |      |

A CHIEF, A CLERK AND 6 INSPECTORS.  
INSPECT AND APPROVE ALL PLUMBING PLANS AND INSTALLATIONS  
OF NEW PLUMBING WORK, WATER SAMPLES ETC.  
(IN 1920) 1,569 PLANS FOR NEW PLUMBING, 10,352 INSPECTIONS; 269 VIOLETATION NOTICES.

| INDUSTRIAL<br>DIVISION | YEAR |      |          |          | 1940 |      |
|------------------------|------|------|----------|----------|------|------|
|                        | 1910 | 1920 | 1930     | 1940     | COST | EMP. |
|                        | -    | -    | \$20,000 | \$18,000 | 8    | 7    |
|                        | -    | -    |          |          |      |      |

A CHIEF AND 6 INSPECTORS.  
CONTROL OF NOISANCES CAUSED BY INDUSTRY; FUMES, SMOKE,  
NOISES, ETC. OF CONDITIONS IN FACTORIES, LODGING HOUSES;  
INDUSTRIAL DISEASE INVESTIGATIONS.  
(IN 1940) 6,402 INSPECTIONS OF 1,800 FACTORIES AS WELL  
AS SPECIAL INSPECTIONS; 856 NOISANCES AND VIOLATIONS ABATED.

| COMMUNICABLE<br>DISEASE<br>DIVISION | YEAR     |          |          |          | 1940 |      |
|-------------------------------------|----------|----------|----------|----------|------|------|
|                                     | 1910     | 1920     | 1930     | 1940     | COST | EMP. |
|                                     | \$16,000 | \$32,000 | \$53,000 | \$62,000 | 12   | 27   |
|                                     | 12       | 17       | 24       |          |      |      |

A CHIEF, A MEDICAL DIRECTOR, 2 DIAGNOSTICIANS, 2 NURSES,  
1 CULTURE COLLECTOR, 4 CLERKS AND 16 INSPECTORS.  
ENFORCE QUARANTINE AND DISINFECTION; AID IN IMMUNIZATION  
CAMPAIGNS; FOLLOW UP ISOLATION HOSPITAL DISCHARGED PATIENTS;  
EPIDEMIOLOGICAL STUDIES. PNEUMONIA PROJECT.

(IN 1940) 17,106 CASES OF DISEASE. PREVALENT DISEASES  
WERE - WHOOPING COUGH 1,051; MEASLES 6,978; MUMPS 2,503;  
SCARLET FEVER 931; CHICKENPOX 2,439; PNEUMONIA 577.

| TUBERCULOSIS<br>DIVISION | YEAR    |          |          |          | 1940 |      |
|--------------------------|---------|----------|----------|----------|------|------|
|                          | 1910    | 1920     | 1930     | 1940     | COST | EMP. |
|                          | \$1,500 | \$17,000 | \$28,000 | \$45,000 | 2    | 16   |
|                          | 2       | 12       | 18       |          |      |      |

MEDICAL DIRECTOR, A CLERK, 5 CLINIC DOCTORS, 9 NURSES.  
EXAMINATION OF ALL POSSIBLE PERSONS FOR CASES AND CON-  
TACTS, EXAMINATION FOR SANATORIA, FLUOROSCOPE AND LUNG COL-  
LAPSE CLINIC, HOME VISITS FOR EDUCATION IN HYGIENE. AID IN  
EXAMINING FOOD HANDLERS AND DOMESTICS; MANTOUX TEST OF SCHOOL  
CHILDREN.

(IN 1940) 13,741 VISITS BY NURSES; 57,112 CLINIC EXAM-  
INATIONS, INCLUDING 29,303 FOOD HANDLERS; TOTAL PNEUMOTHORAX  
TREATMENTS, 1,522.

| CHILD HYGIENE<br>DIVISION | YEAR |          |          |          | 1940 |      |
|---------------------------|------|----------|----------|----------|------|------|
|                           | 1910 | 1920     | 1930     | 1940     | COST | EMP. |
|                           | -    | \$25,000 | \$55,000 | \$59,000 | 21   | 39   |
|                           | -    |          | 35       |          |      |      |

A MEDICAL DIRECTOR, 12 CLINIC DOCTORS, 2 CLERKS, 22  
NURSES, CLEANERS, ETC.

HOME VISITS TO BABIES WEEKLY FOR FIRST MONTH, MONTHLY  
UNDER 1 YEAR AND EVERY THREE MONTHS UP TO FOUR YEARS OF AGE  
TO INSTRUCT MOTHERS; 18 KEEP-WELL-STATIONS, (36 WEEKLY SES-  
SIONS) TO WHICH MOTHERS BRING BABIES FOR EXAMINATION AND IN-  
STRUCTION; LICENSE AND SUPERVISE BOARDING HOMES FOR BABIES.

(IN 1940) 13,591 BABIES SUPERVISED; 64,135 VISITS TO  
HOMES BY NURSES; 24,599 VISITS BY BABIES TO STATIONS.



| YEAR       | 1910  | 1920  | 1930     | 1940 |
|------------|-------|-------|----------|------|
| PAROCHIAL  | 1,200 | 2,000 | \$22,500 |      |
| INSPECTION | EMP.  | 10    | 14       |      |

FOURTEEN NURSES.

SCHOOL INSPECTION FOR THE 12,500 PUPILS IN THE PAROCHIAL SCHOOLS. PHYSICAL EXAMINATIONS; ENFORCE QUARANTINE; SEE THAT DEFECTS ARE PLACED UNDER TREATMENT; IMMUNIZATION CAMPAIGN, HEALTH EDUCATION BY CLASS TALKS.

(IN 1940) DEFECTS CURED INCLUDED 3,231 TEETH; 1133 NOSE AND THROAT, MOSTLY ADENOIDS AND TONSILS, 998 EYE AND EAR CONDITIONS, 975 SKIN. OVER 25,000 SCHOOL TREATMENTS; 8,000 PHYSICAL EXAMINATIONS. 99% IMMUNIZED AND VACCINATED.

| YEAR                       | 1910          | 1920     | 1930     | 1940     |
|----------------------------|---------------|----------|----------|----------|
| BACTERIOLOGICAL LABORATORY | COST \$13,000 | \$27,000 | \$38,000 | \$25,000 |
|                            | EMP. 4        | 10       | 14       | 14       |

A CHIEF, AND ASST. BACTERIOLOGIST, 1 PATHOLOGIST, CLERKS, LABORATORY HELPERS AND CLEANERS.

EXAMINE CONTAGIOUS DISEASE SPECIMENS, CULTURES, BLOOD, SMEARS, ETC., BACTERIOLOGICAL EXAMINATION OF WATER, MILK AND OTHER FOODS, PREPARE SOME SERA, CULTURE OUTFITS, ETC.

(IN 1940) 19,409 G.C. SMEARS, 78,000 HASSERMANNS, KAHNS AND CO. K. FLUIDS, 6,900 PATH. CULTURES AND APPROXIMATELY 8,000 OTHER DISEASE AND FOOD AND WATER SPECIMENS.

THESE FIGURES DO NOT INCLUDE EXAMINATIONS AT VENEREAL DISEASE LABORATORY.

| CITY DISPENSARY | YEAR | 1910     | 1920     | 1930     | 1940      |
|-----------------|------|----------|----------|----------|-----------|
|                 | COST | \$15,500 | \$28,000 | \$62,000 | \$153,000 |
|                 | EMP. | 16       | 24       | 30       | 15        |

SUPERVISING NURSE AND 20 NURSES, PHARMACIST AND 3 ASST. PHARMACISTS; CLINIC PHYSICIANS, ATTENDANTS, DENTISTS, MASSEURS, PORTERS. (20 DISTRICT DOCTORS)

TREAT AT GENERAL AND SPECIAL CLINICS AND VISIT INDIGENT SICK; FILL PRESCRIPTIONS, DISPENSE FREE SERA, ETC.

(IN 1940) 117,000 TREATMENTS OF 33,000 PATIENTS; 27,000 BOTTLES OF COD LIVER OIL AND 125,258 PRESCRIPTIONS, 25,654 VISITS BY DISTRICT DOCTORS.

| YEAR                      | 1910 | 1920 | 1930    | 1940    |
|---------------------------|------|------|---------|---------|
| VENEREAL DISEASE DIVISION | COST | -    | \$1,000 | \$6,000 |
|                           | EMP. | -    | 3       | 50      |

MEDICAL DIRECTOR, CLINIC PHYSICIANS, NURSES, INVESTIGATORS, LABORATORY TECHNICIAN, CLERKS, CLEANERS, ETC.

TREATMENT OF VENEREAL DISEASE PATIENTS, ENFORCE TREATMENT OF ALL REPORTED CASES; INVESTIGATE FOR NEW CASES AND POSSIBLE SOURCE OF INFECTION. ASSIST IN EXAMINATION OF FOOD HANDLERS AND DOMESTICS. SPECIAL PATHOLOGICAL LABORATORY.

(IN 1940) 100,318 TREATMENTS; 60,000 BLOOD TESTS; 16,000 G.C. SMEARS. 9,951 ACTIVE PATIENTS; 37,100 VISITS TO DELINQUENTS, ETC.

| YEAR                 | 1910          | 1920     | 1930     | 1940     |
|----------------------|---------------|----------|----------|----------|
| FOOD & DRUG DIVISION | COST \$ 6,000 | \$27,000 | \$56,000 | \$74,000 |
|                      | EMP. 3        | 12       | 20       | 31       |

A CHIEF, AN ASST CHIEF, 2 CHEMISTS, 20 INSPECTORS, CLERKS, LABORATORY HELP, ETC.

SANITARY INSPECTION OF FOOD PREMISES, MILK PLANTS; SAMPLES OF FOOD AND MILK FOR ADULTERATION, SANITATION AND STANDARDS. ENFORCE FOOD HANDLER LICENSING.

(IN 1940) 17,930 INSPECTIONS OF DAIRIES AND CREAMERIES, 497 BEING EXCLUDED. 1,954 MILK SAMPLES TAKEN AND ANALYZED. 23,484 INSPECTIONS OF OTHER FOOD ESTABLISHMENTS.

| YEAR                | 1910          | 1920     | 1930     | 1940     |
|---------------------|---------------|----------|----------|----------|
| VETERINARY DIVISION | COST \$ 3,000 | \$ 9,000 | \$22,000 | \$17,000 |
|                     | EMP. 2        | 4        | 12       | 14       |

A CHIEF, 2 OTHER VETERINARIANS, CLERK, 10 MEAT INSPECTORS SUPERVISION OF ALL MEAT STORES AND THE SLAUGHTER OF MEAT IN THE CITY. FOOD HANDLER ENFORCEMENT. CONDEMNATIONS.

(IN 1940) 39,000 INSPECTIONS OF MEAT AND FISH STORES, SLAUGHTER HOUSES AND WHOLESALE PLANTS.

| OCCUPATIONAL CLINIC | YEAR-1940 : COST - \$28,000 : EMPLOYEES - 22 |
|---------------------|--|
|                     | A CHIEF, DOCTORS, NURSES AND CLERKS.         |

40,000 SEMI-ANNUAL PHYSICAL EXAMINATIONS EACH YEAR OF APPROXIMATELY 7,000 DOMESTICS AND 23,000 FOOD HANDLERS, INCLUDING FLUOROSCOPE ETC. DOMESTIC WORK ENFORCED BY SANITARY DIVISION, FOOD HANDLER WORK BY VETERINARY AND FOOD & DRUG DIVISIONS. 27,000 BLOOD TESTS IN 1940.

# SANITARY DIVISION

WILLIAM H. YOUNG - ASSIST. HEALTH OFFICER

CHRISTOPHER C. NUGENT, JR. - CHIEF SANITARY INSPECTOR

THE PRIMARY PURPOSE OF THE SANITARY DIVISION OF THE DEPARTMENT OF HEALTH IS TO LOOK AFTER THE SANITARY CONDITION OF THE MUNICIPALITY AND TO ENFORCE THE SANITARY CODE.

THE INSPECTING FORCE IS DIVIDED AS FOLLOWS: FIVE MOTORCYCLE INSPECTORS ARE DETACHED TO INVESTIGATE ALL COMPLAINTS OF A SANITARY NATURE RECEIVED IN THE OFFICE, TO SERVE WRITTEN NOTICES WHERE VIOLATIONS ARE FOUND AND TO FOLLOW UP SAID VIOLATIONS UNTIL ABATED. SIXTEEN INSPECTORS ARE DETACHED TO PATROL DUTY IN THE DISTRICTS ASSIGNED TO THEM, TO MAKE HOUSE TO HOUSE INSPECTIONS, TO MAKE ORIGINAL INSPECTIONS AND TO SECURE THE ABATEMENT OF ALL VIOLATIONS OF THE SANITARY CODE THAT COME UNDER THEIR JURISDICTION.

THE FOLLOWING ARE TYPICAL INSANITARY CONDITIONS ABATED BY OUR SANITARY INSPECTORS

|   |                                     |
|---|-------------------------------------|
| LACK OF SUFFICIENT HEAT IN HOMES AND OFFICES. | DEFECTIVE PLUMBING.                 |
| DEFECTIVE STORM LEADERS AND GUTTERS.          | ACCUMULATION OF GARBAGE AND REFUSE. |
| INSANITARY YARDS, CELLARS AND ALLEYWAYS.      | INSPECTION OF CHICKEN MARKETS.      |
| DARK AND WINDOWLESS ROOMS.                    | HOUSES UNFIT FOR HABITATION.        |
| BUILDINGS DEPRIVED OF CITY WATER.             | INSPECTION-THEATRES-ROOMING HOUSES. |

TWO INSPECTORS, INCLUDING THE ASSIST. CHIEF INSPECTOR, ARE DETACHED WITH THE EMERGENCY CAR ON SPECIAL CALLS, EARLY MORNING LACK OF HEAT, FIREFIGHTS, HAZARDOUS CITY DUMPS FOR SQUATTERS, ENFORCING THE ORDINANCES OF THE BOILERMAKING ORDINANCE AND CONVEYING PATIENTS FROM THE HEALTH DEPARTMENT TO THEIR HOMES OR INSTITUTIONS.

THE USUAL PROCEDURE IN ABATING A NUISANCE IS TO HAVE THE INSPECTOR SERVE EITHER A VERBAL OR WRITTEN NOTICE ON THE PERSON OR FIRM RESPONSIBLE FOR THE NUISANCE, GIVING A SPECIFIED TIME IN WHICH TO ABATE THE NUISANCE. ON FAILURE TO COMPLY WITH SUCH NOTICE, THE VIOLATOR IS SUMMONED BEFORE THE HEALTH OFFICE TO SHOW CAUSE FOR HIS INFRACTION. PERSONS WHO FAIL TO ANSWER THE SUMMONS OF THE HEALTH OFFICER AND THOSE WHO NEGLECT TO ABATE THE NUISANCE WITHIN THE TIME SET FORTH BY THE HEALTH OFFICER ARE TURNED IN FOR LEGAL ACTION AND PROSECUTION WITH THE VIEW OF COLLECTING THE PENALTY PROVIDED BY THE SANITARY CODE.

OURING THE AVERAGE YEAR, OUR SANITARY INSPECTORS MAKE APPROXIMATELY 85,000 INSPECTIONS, FIND 22,000 NUISANCES AND SECURE THE ABATEMENT OF 20,000 NUISANCES THROUGH OUR REGULAR VERBAL OR WRITTEN NOTICE. THE REMAINING ABATEMENTS MUST BE SECURED THROUGH LEGAL ACTION.

## YEARLY REPORT OF THE SANITARY DIVISION

|                            | 1934  | 1935  | 1936  | 1937  | 1938  | 1939  | 1940  |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| TOTAL NO. OF INSPECTIONS   | 8504  | 1042  | 8502  | 9379  | 8900  | 9327  | 8458  |
| INSPECTIONS (COMPLAINTS)   | 7369  | 7446  | 8769  | 9664  | 10056 | 8745  | 8128  |
| NO. OF REINSPECTIONS       | 22632 | 21858 | 20979 | 20071 | 24463 | 20266 | 21130 |
| TOTAL NO. OF NUISANCES     | 17683 | 16589 | 18362 | 18452 | 22453 | 18373 | 24991 |
| NO. OF VERBAL NOTICES      | 6135  | 5593  | 7235  | 7291  | 9045  | 6804  | 8565  |
| WRITTEN NOTICES SERVED     | 5483  | 5392  | 6428  | 5917  | 8932  | 11078 | 10591 |
| ABATEMENTS VERBAL NOTICES  | 5910  | 5723  | 6460  | 6467  | 7908  | 6158  | 7149  |
| ABATEMENTS WRITTEN NOTICES | 5317  | 5713  | 6305  | 5413  | 7494  | 10138 | 9788  |
| TOTAL NO. OF ABATEMENTS    | 11227 | 11436 | 12765 | 11880 | 15402 | 16296 | 16937 |

# INDUSTRIAL HYGIENE DIVISION

LEWIS E. BOUTILLIER, CHIEF

A THOROUGH INSPECTION SERVICE OF ALL TYPES OF INDUSTRIAL ESTABLISHMENTS HAS BEEN MADE BY THE DIVISION FORCES, SPECIAL INSISTENCE BEING MADE ON CONSTRUCTION, LIGHTING, VENTILATION, ADEQUATE FLOOR SPACE, TOILET AND WASHING FACILITIES, AND TRADE HEALTH HAZARDS. THE RESULTS SHOW A GENERAL IMPROVEMENT AND CO-OPERATION UPON THE PART OF THE EMPLOYER AND WORKER ALIKE, AND A CONTINUED RISE TO HIGHER LEVELS IN HEALTH PROTECTION IN THESE PLANTS MAY BE CONFIDENTLY EXPECTED.

DURING THE YEAR, THE HEALTH DEPARTMENT APPOINTED ONE OF OUR CLINIC PHYSICIANS AS INDUSTRIAL HYGIENE PHYSICIAN. HIS DUTIES INCLUDE THE CONTACTING OF EXECUTIVES AND LABOR LEADERS OF LARGE INDUSTRIAL CONCERNS AND SECURE CONSENT TO THE EXAMINATION OF LARGE GROUPS OF WORKERS. THIS IS PARTICULARLY IMPORTANT BECAUSE OF THE DEFENSE PRODUCTION PROGRAM AND MEETS THE URGENT PLEA OF SURGEON GENERAL PARSONS FOR BETTER HEALTH AMONG INDUSTRIAL WORKERS. TO ASSIST IN THIS WORK, THE DEPARTMENT SECURED A PORTABLE FLUOROSCOPE AND A PORTABLE ELECTRO-CARDIOGRAPH MACHINE. EXAMINATIONS CAN BE MADE RIGHT AT THE PLACE OF EMPLOYMENT OR AT SPECIAL MEETING PLACES, EVENINGS. THIS LATTER ARRANGEMENT SEEMS TO BE PREFERRED BY SOME OF OUR LARGE LABOR ORGANIZATIONS, PARTICULARLY THE C. I. O. IN ADDITION TO THIS ASSIGNMENT, OUR INDUSTRIAL HYGIENE PHYSICIAN ALSO COORDINATES THE WORK OF OUR TUBERCULOSIS DIVISION WITH THAT OF THE VENEREAL DISEASE DIVISION SO THAT WHILE EXAMINATIONS ARE BEING MADE OF THE LUNGS AND HEART, BLOOD TESTS CAN ALSO BE TAKEN IN OUR DRIVE AGAINST SYPHILIS.

DURING THE YEAR OUR DIVISION MADE 124 INVESTIGATIONS OF CONDITIONS IN THE HOME IN ORDER TO DETERMINE WHETHER HOMEWORK PERMITS SHOULD BE GRANTED BY THE STATE DEPARTMENT OF LABOR. THERE IS A LEGAL REQUIREMENT IN ORDER TO PREVENT SOME TYPES OF ARTICLES SUCH AS BABY CLOTHING FROM BEING MANUFACTURED IN PREMISES WHERE CONTAMINATION MAY BE PRESENT AND TO PREVENT USE OF A SLEEKLY UNDER-NOURISHED OR EXTREMELY YOUNG CHILDREN IN ARDUOUS WORK.

|                     | <u>1932</u> | <u>1934</u> | <u>1935</u> | <u>1936</u> | <u>1937</u> | <u>1938</u> | <u>1939</u> | <u>1940</u> |
|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| TOTAL INSPECTIONS   | 6155        | 3429        | 5441        | 8540        | 7516        | 7799        | 7036        | 6402        |
| COMPLAINT           | 187         | 254         | 235         | 340         | 301         | 257         | 243         | 318         |
| ORIGINAL            | 5957        | 3175        | 5183        | 8200        | 7215        | 7542        | 6793        | 6084        |
| TOTAL REINSPECTIONS | 1453        | 1376        | 1859        | 2318        | 2126        | 1953        | 2544        | 1949        |
| VIOLATIONS FOUND    | 582         | 573         | 874         | 760         | 652         | 674         | 1036        | 1040        |
| WRITTEN NOTICES     | 546         | 349         | 518         | 463         | 388         | 439         | 558         | 501         |
| VERBAL NOTICES      | 45          | 21          | 28          | 50          | 68          | 24          | 240         | 569         |
| TOTAL NOTICES       | 410         | 370         | 546         | 513         | 456         | 470         | 807         | 1070        |
| TOTAL ABATEMENTS    | 392         | 307         | 1166        | 596         | 496         | 452         | 771         | 856         |
| LODGING HOUSES      | -           | -           | 24          | 74          | 35          | 24          | 23          | 16          |
| PUBLIC BUILDINGS    | 23          | 39          | 87          | 114         | 81          | 297         | 77          | 3           |
| WORKSHOPS AND MILLS | 5575        | 2666        | 4267        | 7360        | 6911        | 6251        | 6874        | 5645        |

# DIVISION OF SANITARY ENGINEERING

CHARLES A. HALLGRIM, CHIEF INSPECTOR

PLUMBING PERMITS ISSUED DURING THE YEAR NUMBERED ALMOST THE SAME AS IN THE FIVE PRECEDING YEARS. PRIVATE BUILDING CONSTRUCTION IN OUR CITY STILL REMAINS AT A LOW LEVEL.

THE HUNT FOR CROSS-CONNECTIONS IN OUR WATER SUPPLY PIPES HAS BEEN CONTINUED, AND THIRTEEN POSSIBLE SOURCES OF POLLUTION WERE ELIMINATED DURING THE PAST YEAR.

DURING 1940, WE BEGAN A SYSTEMATIC INSPECTION OF BUILDINGS WHERE FIRES HAD OCCURRED (SICARING REPORTS OF FIRES FROM THE FIRE DEPARTMENT) TO DISCOVER WHETHER ANY PLUMBING SYSTEM HAD BEEN DAMAGED THEREBY. WE FOUND LESS THAN ONE HALF OF ONE PERCENT OF THE PLUMBING SYSTEMS DAMAGED BY FIRES.

INSPECTION OF WATER PIPING INSTALLED IN CONNECTION WITH OIL BURNER INSTALLATIONS HAS CONTINUED, AND, NO DOUBT, DUE TO THE FACT THAT WATER PIPING INSTALLATIONS ARE BEING MADE BY LICENSED PLUMBERS, DANGEROUS CONNECTIONS HAVE BEEN DISCONTINUED.

THE CITY WATER SUPPLY WAS GREATLY IMPROVED IN FLAVOR BECAUSE THE DRAUGHT OF LAST YEAR ENDED IN THE EARLY MONTHS OF 1940.

WE DID NOT FIND ANY CONNECTIONS USED FOR THE INJECTION OF CHEMICALS INTO THE WATER SUPPLY PIPES IN USE, WHICH LEADS TO THE BELIEF THAT OWNERS OF THE LARGER BUILDINGS WHERE THIS PRACTICE HAD BEEN DISCOVERED PREVIOUSLY, NOW REALIZE THAT THIS IS A PRACTICE FRAUGHT WITH DANGER AND NOT EFFICIENT AS A RUST REMOVER.

|  | 1933   | 1934   | 1935   | 1936   | 1937  | 1938   | 1939   | 1940   |
|--|--------|--------|--------|--------|-------|--------|--------|--------|
| PLANS APPROVED - NEW SYSTEMS - - - -   | 125    | 112    | 134    | 161    | 202   | 140    | 189    | 206    |
| PLANS APPROVED - OLD SYSTEMS - - - -   | 1180   | 1276   | 1388   | 1386   | 1276  | 1227   | 1194   | 1363   |
| SEWER INSPECTIONS - - - - -            | 166    | 160    | 189    | 202    | 271   | 235    | 263    | 294    |
| PLUMBING INSPECTIONS - - - - -         | 12119  | 6900   | 8371   | 6353   | 6435  | 5560   | 4694   | 3777   |
| SPECIAL INSPECTIONS - - - - -          | 97     | 2871   | 2084   | 2462   | 2764  | 3317   | 3640   | 4946   |
| FINAL PLUMBING INSPECTIONS - - - -     | 1364   | 1281   | 1464   | 1493   | 1380  | 1395   | 1260   | 1315   |
| WATER TESTS - - - - -                  | 398    | 380    | 499    | 549    | 558   | 453    | 433    | 470    |
| SMOKE TESTS - - - - -                  | 46     | 40     | 83     | 62     | 92    | 63     | 51     | 75     |
| PLUMBING PERMITS ISSUED - - - - -      | 1105   | 1388   | 1522   | 1547   | 478   | 367    | 1385   | 1363   |
| SEWER PERMITS ISSUED - - - - -         | 91     | 62     | 104    | 100    | 115   | 91     | 154    | 108    |
| RELAY SEWER PERMITS ISSUED - - - -     | 95     | 82     | 84     | 63     | 92    | 95     | 80     | 85     |
| CESSEPOOL PERMITS ISSUED - - - - -     | 1      | 1      | 1      | 5      | 4     | 7      | 2      | 1      |
| SEPTIC TANK PERMITS ISSUED - - - -     | 4      | 1      | 1      | 6      | 3     | 1      | 2      | 1      |
| COMPLAINTS RECEIVED - - - - -          | 750    | 648    | 584    | 551    | 513   | 533    | 593    | 490    |
| VIOLATIONS NOTICES SERVED - - - -      | 164    | 167    | 143    | 122    | 105   | 263    | 311    | 269    |
| NOTICES COMPLIED WITH - - - - -        | 101    | 103    | 146    | 140    | 64    | 215    | 246    | 257    |
| SUIT CASES INSTITUTED - - - - -        | 29     | 29     | 20     | 12     | 6     | 40     | 71     | 46     |
| SUIT CASES DISCONTINUED - - - - -      | 19     | 12     | 12     | 9      | 5     | 17     | 35     | 77     |
| PENALTIES FOR VIOLATIONS - - - - -     | \$120. | \$243. | \$ 75. | \$ 45. | \$ 5. | \$100. | \$ 95. | \$ 15. |
| MASTER PLUMBERS LICENSE EXAM. - - -    | 14     | 14     | 14     | 19     | 12    | 9      | 7      | 9      |
| " " " PASSED - - - - -                 | 14     | 11     | 8      | 10     | 9     | 4      | 6      | 8      |
| " " " ISSUED - - - - -                 | 474    | 485    | 464    | 469    | 461   | 461    | 436    | 438    |
| COMPLAINTS FROM FOOD & DRUG DIV. - -   | -      | -      | -      | -      | -     | 799    | 311    | 318    |
| CROSS CONNECTIONS DISCONTINUED - - -   | -      | -      | -      | -      | -     | 15     | 11     | 13     |
| WATER SAMPLES COLLECTED - - - - -      | -      | -      | -      | -      | -     | 833    | 1055   | 955    |
| INSPECTIONS - OIL BURNER INSTALLATIONS | -      | -      | -      | -      | -     | -      | 4020   | 5459   |
| COMPLAINTS FROM VETERINARY DIV. - -    | -      | -      | -      | -      | -     | -      | -      | 28     |
| FEES REPORTED FOR PLUMBING INSPECTIONS | -      | -      | -      | -      | -     | -      | -      | 1638   |
| ICE SAMPLES COLLECTED - - - - -        | -      | -      | -      | -      | -     | -      | -      | 11     |

# COMMUNICABLE DISEASE DIVISION

DR. J. W. GARDAM, MED. CAL. DIRECTOR -- OBAD J. H. COLE, CHIEF INSPECTOR.

THE COMMUNICABLE DISEASE DIVISION IS RESPONSIBLE FOR CONTROLLING AND PREVENTING THE SPREAD OF DANGEROUS DISEASES. CASES REPORTED TO US BY PHYSICIANS, NURSES, ETC., ARE IMMEDIATELY DETECTED, ISOLATION ESTABLISHED AND CONTACTS QUARANTINED. PLACARDS PLACED, AND CASES FINALLY RELEASED AT THE TERMINATION OF THE USUAL PERIOD ESTABLISHED BY LAW. MANY HOMES ARE VISITED FREQUENTLY WHEN NECESSARY TO MAINTAIN STRICT SUPERVISION TO ENSURE PROPER QUARANTINE.

THE DIVISION ALSO CARRIES OUT A PROGRAM OF IMMUNIZATION AND VACCINATIONS. STATISTICAL CHARTS FOR FUTURE STUDY ARE MADE AND ELABORATED FOR THE HEALTH OFFICER'S USE IN PUBLICITY CAMPAIGNS, STUDY OF DISEASE TRENDS, ETC. ALL CONTACTS TO DISEASES ARE EXAMINED BY THE DIVISION BEFORE TURNING TO SCHOOL OR BUSINESS, THIS MAINTAINING DEFINITE CONTACT AND CO-OPERATION WITH THE SCHOOL SYSTEM AND BUSINESS ORGANIZATIONS.

## TOTAL NUMBER OF INSPECTORS' VISITS 1930 TO 1940 (INCLUSIVE)

| 1930   | 1931   | 1932   | 1933   | 1934   | 1935   | 1936   | 1937   | 1938   | 1939   | 1940   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 25,798 | 21,425 | 24,889 | 36,166 | 38,613 | 37,618 | 25,483 | 28,368 | 23,785 | 21,814 | 30,141 |

## MORB. D.T. REPORT -- 1932 TO 1940

| DISEASE            | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 |
|--------------------|------|------|------|------|------|------|------|------|------|
| * DIPHTHERIA - - - | 71   | 22   | 10   | 12   | 2    | 5    | 23   | 13   | NONE |
| * SCARLET FEVER -  | 981  | 767  | 641  | 643  | 3146 | 504  | 496  | 1201 | 931  |
| * TYPHOID FEVER -  | 25   | 8    | 13   | 15   | 11   | 6    | 5    | 25   | 6    |
| TUBERCULOSIS - -   | 786  | 757  | 671  | 654  | 645  | 575  | 600  | 534  | 586  |
| LOBAR PNEUMONIA    | 1094 | 1201 | 1014 | 1092 | 1013 | 1210 | 889  | 1069 | 994  |
| BRONCHO " "        | 698  | 943  | 860  | 912  | 818  | 928  | 715  | 662  | 583  |
| * EPIDEM-MENING. - | 9    | 10   | 7    | 8    | 47   | 24   | 4    | 3    | 7    |
| * INFANT-PARALYSIS | 4    | 42   | 6    | 49   | 4    | 19   | 6    | 5    | 10   |
| * WHOOPING COUGH - | 1307 | 1510 | 1764 | 2389 | 1154 | 929  | 2116 | 2343 | 1051 |
| * MEASLES - - - -  | 1571 | 7398 | 491  | 6907 | 643  | 9323 | 399  | 163  | 6878 |
| GERMAN MEASLES -   | 97   | 153  | 1675 | 1069 | 375  | 445  | 91   | 81   | 170  |
| * CHICKENPOX - - - | 1916 | 2045 | 2649 | 2630 | 2069 | 2571 | 4164 | 1173 | 2439 |
| * MUMPS - - - - -  | 3227 | 989  | 165  | 1040 | 2952 | 919  | 1094 | 679  | 3503 |
| PUERPERAL FEVER    | 5    | 2    | 6    | 7    | 0    | 1    | 1    | 0    | 4    |
| DYSENTERY - - -    | 1    | 2    | 3    | 2    | 1    | 5    | 3    | 1    | 2    |
| TETANUS - - - -    | 4    | 6    | 2    | 5    | 3    | 3    | 1    | 2    | 1    |
| INFLUENZA - - -    | 551  | 740  | 421  | 259  | 236  | 312  | 39   | 104  | 89   |

\* PLACARDED. TYPHOID FEVER AND INFANTILE PARALYSIS INVARIABLY HOSPITALIZED.

\*\* WHOOPING COUGH - ARM BANDS ON PATIENTS.



# RESPIRATORY BUREAU

DR. HENRY SIMON (IN CHARGE)

## PNEUMONIA MORTALITY

LOWEST MORTALITY IN THE HISTORY OF THE HEALTH DEPARTMENT.  
IN 1940 -- 45.2 PER 100,000 POPULATION.

| YEAR | CASES | DEATHS | MORTALITY PER CM | FATALITY RATE | TREATMENT   |
|------|-------|--------|------------------|---------------|---|
| 1937 | 2138  | 429    | 93.7             | 20 %          | NO ORGANIZED PNEUMONIA CAMPAIGN                   |
| 1938 | 1604  | 312    | 68.1             | 19.5%         | SIX MONTHS USE OF FREE SERUM.<br>NO SULFAPYRIDINE |
| 1939 | 1731  | 231    | 50.4             | 13.3%         | FULL YEAR OF SERUM AND SULFAPYRIDINE              |
| 1940 | 1577  | 194    | 45.2             | 12.3%         | FULL YEAR OF SERUM AND CHEMOTHERAPY               |

THE LOWEST PREVIOUS MORTALITY WAS IN 1939 WHEN THE MORTALITY WAS 50.4 PER 100,000 POPULATION.

## SERUM

THE HEALTH DEPARTMENT MAINTAINS A 24 HOUR SERUM DISTRIBUTION SERVICE. BETWEEN THE HOURS OF 9 TO 4 P.M. WEEK-DAYS AND SATURDAY 9 TO 12 M., SERUM IS AVAILABLE AT THE PNEUMONIA DIVISION. AT OTHER TIMES, THE SERUM IS DISTRIBUTED BY THE PHYSICIANS' OFFICE OF 70 SHAW AVENUE. SERUM FOR ALL TYPES OF PNEUMONIA IS DISTRIBUTED FREE. THE STATE DEPARTMENT OF HEALTH PURCHASES THE SERUM AND USES LOCAL HEALTH DEPARTMENTS AS DISTRIBUTING CENTERS. THE NEWARK HEALTH DEPARTMENT IS THE SOLE LOCAL DISTRIBUTOR OF SERUM IN THE STATE OF NEW JERSEY. IN 1940, SERUM WAS DISTRIBUTED TO 148 CASES.

EVIDENCE IS ACCUMULATING SHOWING THAT THE COMBINATION USE OF BOTH SERUM AND SULFAPYRIDINE OFFERS THE PNEUMONIA PATIENT THE BEST CHANCE FOR RECOVERY.

THE HEALTH INSPECTORS AND RADIO CARS FACILITATE QUICK SERUM DELIVERY.

SULFAPYRIDINE & SULFATHIAZOLE SULFAPYRIDINE AND SULFATHIAZOLE ARE AVAILABLE FOR INDIGENT CASES.

## SULFAPYRIDINE STATISTICS ON REPORTED CASES OF PNEUMONIA.

| YEAR | CASES | DEATHS | FATALITY RATE |
|------|-------|--------|---------------|
| 1939 | 659   | 51     | 7.7%          |
| 1940 | 1033  | 79     | 7.6%          |

## PNEUMONIA TYPING

PNEUMONIA TYPING IS PERFORMED BY THE BACTERIOLOGICAL LABORATORY BETWEEN THE HOURS OF 9 A.M. TO 4 P.M. AT OTHER TIMES THE TYPING IS PERFORMED BY THE PNEUMONIA DIVISION. WHEN A POSITIVE SPUTUM TYPING IS NEGATIVE, A MOUSE IS INJECTED INTRAPERITONEALLY, AND THE PNEUMOCOCCI ARE CULTURED; IF PNEUMOCOCCI ARE PRESENT, THERE IS SUFFICIENT GROWTH WITHIN 4 TO 8 HOURS TO PRODUCE A TYPE.

## PNEUMONIA TYPING TABLE

| YEAR | NO. OF TYPINGS | POSITIVE | RATE  |
|------|----------------|----------|-------|
| 1939 | 1136           | 605      | 70.9% |
| 1940 | 846            | 533      | 63 %  |

THE DECREASE IN THE NUMBER OF CASES TYPED IS CO-INCIDENTAL WITH THE INCREASED USE OF PNEUMONIA TYPING. PNEUMONIA TYPING, EVEN WHEN CHEMOTHERAPY IS USED, SHOULD BE A ROUTINE THERAPEUTIC MEASURE. IT ENABLES ONE TO ADMINISTER SERUM PROMPTLY IF THE PATIENT DOES NOT RESPOND TO CHEMOTHERAPY. A PATHOGENIC TYPE FOUND ENABLES ONE TO MAKE AN ACCURATE DIAGNOSIS; ALSO AN EARLY DIAGNOSIS, WHEN THE CHEST SIGNS OF CONSOLIDATION ARE DIFFICULT TO DETECT. AN ENCOURAGING ASPECT OF THE PNEUMONIA CAMPAIGN IS THE INCREASING TYPING OF BRONCHO-PNEUMONIA CASES.

BLOOD CULTURES - BLOOD CULTURES SHOULD BE TAKEN ROUTINELY ON ALL PNEUMONIA PATIENTS. THE PRESENCE OF A BACTEREMIA OFFERS A SERIOUS PROGNOSIS AND CALLS FOR THE USE OF THE COMBINATION OF SERUM AND SULFONAMIDE DRUGS. BLOOD CULTURE VACUUM TUBES ARE AVAILABLE FOR FREE DISTRIBUTION.

#### EDUCATION OF THE LAITY

THE CITIZENRY OF NEWARK HAVE BEEN IMPRESSED WITH THE IMPORTANCE OF CALLING THE DOCTOR EARLY. THIS HAS BEEN FOSTERED THROUGH THE HOLDING IN THE THEATERS OF THE CITY OF SEVERAL FILMS, A NEW DAY, PUBLIC HEALTH, AND IN THE NEWS, NEWSPAPER LITERATURE, THE LANDING IN SIGNS, A STREET CAR OF THE CITY, AND THE AVAILABILITY OF NURSES AND DOCTORS GIVING THE EARLY SIGNS AND SYMPTOMS OF PNEUMONIA.

SUGGESTION OF THE HEALTH DEPARTMENT IS REQUIRED TO PREVENT CASES OF PNEUMONIA AND TO FILL OUT VACCINE RECORDS. WHEN THE CASE IS TYPED AND WHETHER SERUM OR CHEMOTHERAPY IS USED. PHYSICIANS ARE CONTACTED AND INFORMED ABOUT THE IMPORTANCE OF PNEUMONIA TYPING AND THE PROPER USE OF SERUM AND SULFAPYRIDINE. THE DANGERS OF SULFAPYRIDINE TOXICITY ARE STRESSED.

HEALTH DEPARTMENT RECORDS INDICATE THAT THE REPORTING OF CASES OF PNEUMONIA IN NEWARK SURPASSES ANY OTHER CITY IN NEW JERSEY.

#### HOOPING COUGH CONTROL

HOOPING COUGH IN NEWARK - THE SERVICES OF KENDRICK AND KILLER, SAUER, FABER AND MILLER, AND OTHER INVESTIGATORS INDICATE THAT SATISFACTORY IMMUNITY IS PRODUCED BY THE USE OF POTENT WHOOPING COUGH VACCINE.

THE FIRST WHOOPING COUGH CLINIC IN THE CITY OF NEWARK WAS ESTABLISHED IN JULY 1939. THIS CLINIC WAS HELD ONCE A WEEK AT 77 ARLINGTON STREET. THE MATERIAL USED WAS THE DETOXIFIED ANTIGEN AND THE MODIFIED SAUER VACCINE PREPARED ACCORDING TO THE METHOD OF KENDRICK AND KILLER. THE ANTIGEN DILUTIONS WERE 1:3, 1:10, 1:20, 1:40, 1:80, 1:160, 1:320, 1:640, 1:1280, 1:2560, 1:5120, 1:10240, 1:20480, 1:40960, 1:81920, 1:163840, 1:327680, 1:655360, 1:1310720, 1:2621440, 1:5242880, 1:10485760, 1:20971520, 1:41943040, 1:83886080, 1:167772160, 1:335544320, 1:671088640, 1:1342177280, 1:2684354560, 1:5368709120, 1:10737418240, 1:21474836480, 1:42949672960, 1:85899345920, 1:171798691840, 1:343597383680, 1:687194767360, 1:1374389534720, 1:2748779069440, 1:5497558138880, 1:10995116277760, 1:21990232555520, 1:43980465111040, 1:87960930222080, 1:175921860444160, 1:351843720888320, 1:703687441776640, 1:1407374883553280, 1:2814749767106560, 1:5629499534213120, 1:11258999068426240, 1:22517998136852480, 1:45035996273704960, 1:90071992547409920, 1:180143985094819840, 1:360287970189639680, 1:720575940379279360, 1:1441151880758558720, 1:2882303761517117440, 1:5764607523034234880, 1:11529215046068469760, 1:23058430092136939520, 1:46116860184273879040, 1:92233720368547758080, 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OUR STUDY SHOWS THAT CONSIDERABLE IMMUNITY TO PERTUSSIS IS ACQUIRED AFTER TWO INJECTIONS OF THE COMBINED VACCINE; THE USE OF THREE OR FOUR INJECTIONS AT ONE MONTH INTERVALS WOULD PRODUCE SATISFACTORY IMMUNITY TO BOTH DIPHTHERIA AND WHOOPING COUGH. THE ATTACK AND COMMUNICABILITY RATE TO PERTUSSIS OF CHILDREN WHO HAVE BEEN IMMUNIZED WITH THE COMBINED VACCINE IS BEING STUDIED.

#### COUGH PLATES

DURING THE PAST YEAR, A COUGH PLATE DIAGNOSTIC SERVICE HAS BEEN MADE AVAILABLE TO PHYSICIANS OF THE CITY OF NEWARK. DURING 1940, COUGH PLATES WERE PERFORMED ON 535 CHILDREN. THE COUGH PLATE ENABLES THE DOCTOR TO MAKE AN EARLY DIAGNOSIS OF WHOOPING COUGH. A MILD CASE OF WHOOPING COUGH MAY NOT WHOOP AND THE ONLY WAY TO MAKE THE DIAGNOSIS IS BY THE USE OF THE COUGH PLATE. APPRECIATIVE COMMENTS HAVE BEEN RECEIVED BY PHYSICIANS FOR THE DIAGNOSTIC HELP THE COUGH PLATE HAS PROVIDED.



## FUMIGATION-PEST CONTROL

THOMAS M. McGRATH -- CHIEF FUMIGATION INSPECTOR.

THE SUPERVISION OF DANGEROUS GAS FUMIGATIONS AND PEST CONTROL PROCEDURES WAS STARTED IN 1938. ALL FUMIGATIONS WITH THE EXCEPTION OF JUNKYARD SALE FUMIGATIONS ARE CARRIED OUT BY FUMIGATING COMPANIES LICENSED BY THIS DEPARTMENT. JUNKYARD SALE FUMIGATIONS ARE PERFORMED BY DEPARTMENT INSPECTORS.

THE INSPECTORS ASSIGNED TO FUMIGATION SUPERVISION ARE TRAINED AND HOLD NATIONAL RED CROSS CERTIFICATES FOR FIRST AID. THE EQUIPMENT THEY CARRY AND USE, CONSISTS OF GAS MASKS, WARNING SIGNS, PERMITS, SAFETY LOCKS, GAS DETECTOR AND ANTIDOTES.

#### RODENT AND INSECT CONTROL

BECAUSE OF THE GREAT NUMBER OF DILAPIDATED STRUCTURES AND THE INCREASE IN THE NUMBER OF DEMOLITIONS IN THE CITY, RAT COMPLAINTS HAVE GREATLY INCREASED. THE PROBLEM IS NOT CONFINED TO ANY PARTICULAR SECTION OF THE CITY BUT IS WIDESPREAD. SINCE MARCH 1939, THE DEPARTMENT HAS ENGAGED IN A DEFINITE AND PROGRESSIVE CAMPAIGN TO ELIMINATE THESE DANGEROUS PESTS.

THROUGH THE COOPERATION OF THE BUILDING DEPARTMENT ALL STRUCTURES INTENDED FOR DEMOLITION ARE INSPECTED FOR RODENTS BY HEALTH DEPARTMENT INSPECTORS. WHEN BUILDINGS ARE FOUND INFESTED, THE BUILDING COMPANIES EMPLOY LICENSED PEST CONTROL OPERATORS TO FUMIGATE. THE NEWARK HOUSING AUTHORITY HAS MADE SPECIAL PROVISIONS FOR DEMOLITION, BASED UNDER THE SUPERVISION OF THE DEPARTMENT OF HEALTH. THE MAJORITY OF THE OLD STRUCTURES WERE BADLY INFESTED WITH RATS AND VERMIN.

COMPLAINTS OF INSECT INVASIONS OF DWELLINGS, FACTORIES, FOOD AND BEVERAGE PLANTS, ETC., ARE INVESTIGATED, INSECTS IDENTIFIED AND PROPER CONTROL MEASURES ADVISED. THE EMPHASIS IS PLACED UPON THE EMPLOYMENT OF COMPETENT PEST CONTROL OPERATORS. HOUSEHOLDS ARE WARNED AGAINST THE INDISCRIMINATE USE OF POISONS FOR EXTERMINATION PURPOSES.





# FOOD & DRUG DIVISION

SAMUEL G. SHARPELL - CHIEF INSPECTOR

DURING THE YEAR OUR INSPECTORS CARRIED OUT THE FOLLOWING PROGRAM:

FOOD & DRUG CONTROL - INSPECTORS DETAILED TO THIS TYPE OF WORK, CARRY OUT:

THE INSPECTION AND SUPERVISION OF ALL TYPES OF FOOD AND DRUG ESTABLISHMENTS, RESTAURANTS, TAVERNS, GROCERIES, CONFECTIONERIES, AND ALL OTHER TYPES OF RETAIL AND WHOLESALE, MANUFACTURING, PACKING AND DISTRIBUTING ESTABLISHMENTS LOCATED WITHIN THE LIMITS OF THE CITY OF NEWARK AND WITHIN THE LIMITS OF THE HART COLLAR DISTRICTS TO WHICH THEY ARE ASSIGNED.

THESE ESTABLISHMENTS ARE CHECKED AS TO PROPER CONSTRUCTION, EQUIPMENT, METHODS OF OPERATION, ETC., QUALITY OF FOODS AND DRUGS SOLD, PROPER LABELING, FOODHANDLER LICENSES, CONDEMNATION OF ALL FOODS AND DRUGS WHERE FOUND UNFIT FOR HUMAN CONSUMPTION. ENFORCE ALL FEDERAL, STATE AND LOCAL LAWS, ORDINANCES, CODES AND REGULATIONS. INVESTIGATE COMPLAINTS OF ALL TYPES AND NATURES PERTAINING TO GENERAL FOOD AND DRUG CONTROL WORK AND FOOD POISONINGS.

COLLECT FOOD AND DRUG SAMPLES FOR BACTERIAL AND CHEMICAL ANALYSES. TESTIFY IN COURT WHENEVER NECESSARY.

FREQUENT CONFERENCES ARE HELD TO DISCUSS FOOD AND DRUG CONTROL WORK, REGULATIONS, AND WEEKLY FOOD AND DRUG HEARINGS ARE HELD BY THE HEALTH OFFICER, AT WHICH OPERATORS OF FOOD AND DRUG ESTABLISHMENTS, WITH VIOLATIONS OF HEALTH REGULATIONS, AND IN MANY INSTANCES THE PROPERTY OWNERS, ARE PRESENT AND VIOLATIONS ARE DISCUSSED WITH THE HEALTH OFFICER AND DISPOSITIONS MADE.

## PRINCIPAL CITY FOOD AND DRUG INSPECTIONS

| TYPE OF FOOD ESTABLISHMENT                  | 1934  | 1935  | 1936  | 1937  | 1938  | 1939  | 1940  |
|---|-------|-------|-------|-------|-------|-------|-------|
| RESTAURANTS, LUNCHROOMS, ETC. - - - - -     | 7321  | 5809  | 6158  | 5840  | 6064  | 7934  | 7333  |
| CAFES-TAVERNS - - - - -                     | 3675  | 3566  | 4551  | 3759  | 3514  | 3238  | 2832  |
| BAKERIES-MFG. PLANTS - - - - -              | 288   | 252   | 211   | 516   | 687   | 1977  | 351   |
| RETAIL STORES - - - - -                     | 449   | 1398  | 1165  | 766   | 1365  | 1011  | 978   |
| WHOLESALE DEALERS - - - - -                 | 48    | 32    | 108   | 59    | 47    | 111   | 12    |
| CANDY-RETAIL STORES - - - - -               | 812   | 2567  | 2464  | 1696  | 2570  | 262   | 2602  |
| GROCERIES-RETAIL STORES - - - - -           | 3482  | 4412  | 4591  | 2810  | 5367  | 5880  | 5257  |
| PRODUCE-RETAIL STORES - - - - -             | 551   | 883   | 853   | 735   | 1053  | 1189  | 1063  |
| DRUGS-RETAIL STORES - - - - -               | 407   | 487   | 579   | 272   | 465   | 496   | 621   |
| ICE CREAM-MFG. PLANTS - NEWARK - - - - -    | 219   | 100   | 81    | 198   | 183   | 213   | 146   |
| ICE CREAM-MFG. PLANTS-OUT OF CITY - - - - - | 65    | 46    | 51    | 52    | 51    | 115   | 67    |
| NON-ALCOHOLIC BEV. PLANTS-NEWARK - - - - -  | 115   | 56    | 44    | 46    | 155   | 95    | 86    |
| OUT OF CITY - - - - -                       | 37    | 4     | 39    | 9     | 16    | 45    | 9     |
| MISCL. WHOLESALE & FOOD MFG. - - - - -      | -     | -     | -     | -     | -     | 327   | 433   |
| MISCELLANEOUS - - - - -                     | -     | -     | -     | -     | -     | 244   | 189   |
| SPECIAL INVESTIGATIONS - - - - -            | 459   | 1197  | 403   | 1754  | 1483  | 1085  | 205   |
| TOTAL INSPECTIONS - - - - -                 | 19632 | 22579 | 23406 | 19667 | 23738 | 25975 | 23484 |

OF THE TOTAL INSPECTIONS, 6,924 WERE REINSPECTIONS AND 3,876 NOTICES WERE SERVED. PRACTICALLY ALL VIOLATIONS ABATED; THE ABOVE ARE THE MOST FREQUENT BUT DO NOT INCLUDE MANY VARIED TYPES OF INSPECTIONS.

CITY MILK CONTROL - INSPECTORS DETAILED TO THIS TYPE OF WORK, CARRY OUT:

THE COLLECTION OF MILK AND CREAM SAMPLES FOR BACTERIAL AND CHEMICAL ANALYSES AND FOR SEDIMENT AND PHOSPHATASE MILK TESTS.

THESE SAMPLES ARE OBTAINED FROM CITY MILK DEALERS, THEIR VEHICLES, FROM RAILROAD TERMINALS AND NUMEROUS ESTABLISHMENTS WHERE MILK AND CREAM IS HANDLED, STORED, DISTRIBUTED AND SOLD ON THE PREMISES.

INVESTIGATE ALL COMPLAINTS PERTAINING TO IMPROPER HANDLING, STORING, DISTRIBUTION AND SALE, AND SUSPECTED ADULTERATION OF MILK AND CREAM.

COUNTRY MILK CONTROL - INSPECTORS DETAILED TO THIS TYPE OF WORK, CARRY OUT:

THE INSPECTION OF COUNTRY MILK PLANTS AND DAIRIES SHIPPING MILK AND CREAM INTO THE CITY OF NEWARK AND MAINTAINED ON THE NEWARK APPROVED LIST OF MILK AND CREAM SUPPLIERS. THESE PLANTS AND DAIRIES ARE INSPECTED FOR PROPER CONSTRUCTION, EQUIPMENT, METHODS OF OPERATION, ETC. TO SEE AND DETERMINE IF THEY CONFORM TO NEW JERSEY STATE AND NEWARK REGULATIONS AND REQUIREMENTS.

SAMPLES OF RAW MILK ARE COLLECTED AT COUNTRY MILK PLANTS FOR SHIPMENT TO CITY LABORATORY. TEMPERATURE, SEDIMENT AND PHOSPHATASE MILK TESTS ARE MADE AT COUNTRY PLANTS. INVESTIGATIONS ARE MADE OF CONTAGIOUS DISEASE CASES THAT OCCUR AT COUNTRY MILK PLANTS AND ON DAIRIES.

CHECK-UPS ARE MADE OF RECORDS COVERING VETERINARY PHYSICAL EXAMINATION OF DAIRY HEADS, PROPER SEGREGATION OF DISEASED AND AILING ANIMALS ON DAIRIES AND THEIR DISPOSITION.

MILK CONTROL IN NEWARK

WHEN MILK CONTROL WORK WAS FIRST STARTED BY OUR DEPARTMENT, MILK PLANTS AND DAIRIES, THEIR CONSTRUCTION AND EQUIPMENT AND THE PRODUCTION, HANDLING AND DISTRIBUTION METHODS USED FOR THE BULK OF OUR SUPPLY, WERE WELL BELOW THE MAJORITY OF THE MILK SOLD IN OUR COMMUNITY WAS RAW MILK. TO INSURE SUFFICIENT INTEREST BY DEALERS, MILK PLANT OPERATORS AND DAIRYMEN TO IMPROVE STANDARDS, IT WAS NECESSARY TO GRADE MILK IN ORDER THAT THOSE SUPPLYING A BETTER ARTICLE WOULD BE PAID A HIGHER PRICE. THIS SITUATION EXISTED FOR MANY YEARS.

TODAY THIS SITUATION NO LONGER PREVAILS. THROUGH YEARS OF EDUCATIONAL WORK, THROUGH THE CONSCIENTIOUS AND EFFICIENT WORK OF HEALTH DEPARTMENTS AND THEIR INSPECTIONAL STAFFS AND THROUGH THE SPLENDID COOPERATION RECEIVED FROM MILK DEALERS, MILK PROCESSORS, PLANT OPERATORS AND DAIRYMEN, OUR GRADE A AND GRADE B SUPPLIES, IN PLANTS, EQUIPMENT AND DAIRIES HAVE BEEN BROUGHT UP TO A POINT WHERE ALL ARE WELL ABOVE OUR FORMER GRADE A STANDARDS. OUR LABORATORY RECORDS ON SAMPLES OF MILK OF BOTH GRADES OVER THE LAST FEW YEARS HAS SHOWN THAT THERE IS LITTLE MATERIAL DIFFERENCE IN THE MATTER OF AVERAGES ON BACTERIAL COUNTS AND BUTTER-FAT CONTENTS, ALTHOUGH THE DIFFERENCE IN THE PRICE CHARGED FOR EACH GRADE IS STILL QUITE MATERIAL.

THE CITY OF NEWARK HAS A NUMBER OF GRADE A MILK PLANTS OPERATING IN ITS SUBURBS THAT MAKE A PRACTICE OF DEGRADING A CERTAIN AMOUNT OF THEIR SUPPLY OF MILK DAILY AND BOTTLING, CAPPING AND SELLING SAME AS GRADE B MILK AND AT GRADE B PRICES. IN MANY CASES, HOOD TYPE BOTTLE CAPS ARE USED ON BOTH THEIR GRADE A AND GRADE B BOTTLES OF MILK. UNDER OUR REGULATIONS, WE CANNOT CALL THIS MISREPRESENTATION BUT HERE WE HAVE A SITUATION WHERE CUSTOMERS PURCHASING GRADE A MILK FROM THESE PLANTS, ARE PAYING GRADE A PRICES AND THEIR NEIGHBORS PURCHASING GRADE B MILK FROM THESE SAME PLANTS, ARE PAYING GRADE B PRICES AND RECEIVING GRADE A MILK UNDER A GRADE B CAP.

ON MARCH 13TH, 1940, THE STATE DEPARTMENT OF HEALTH ASKED THE ATTORNEY GENERAL FOR AN OPINION AS TO WHETHER MUNICIPALITIES, TOWNS, BY ORDINANCE, ESTABLISH GRADES OF MILK SUCH AS GRADE A AND GRADE B. ON APRIL 18, 1940, HON. DAVID T. SILVERMASTER, ATTORNEY GENERAL OF NEW JERSEY RENDERED THE FOLLOWING OPINION: "THE VARIOUS REQUIREMENTS FOR DAIRY PRODUCTS ARE MORE PARTICULARLY ENUMERATED IN CHAPTER 10 AND TITLE 24. THE LEGISLATURE HAS IN THIS LAST MENTIONED FRAGMENT ESTABLISHED A MINIMUM BASIC STANDARD FOR THE PRODUCTION, HANDLING AND THE DISTRIBUTION OF MILK, CREAM AND MILK PRODUCTS IN THE STATE OF NEW JERSEY. THE LEGISLATURE DID NOT PROCLAIM A CERTAIN STANDARD FOR GRADE A MILK AND ANOTHER STANDARD FOR GRADE B MILK. THE LAW BEING SILENT ON SUCH CLASSIFICATIONS, THERE IS NO WARRANT TO ORDAIN VARIOUS OTHER STANDARDS THAT TRANSGRESS THE REQUIREMENTS THAT HAVE BEEN LEGISLATIVELY ORDAINED. IN CONCLUSION, THERE IS NO LEGAL DIFFERENTIATION BETWEEN GRADE A AND GRADE B MILK AND THEREFORE ANY ATTEMPT BY YOUR DEPARTMENT OR ANY LOCAL BOARD OF HEALTH TO CREATE THESE NON-EXISTENT STANDARDS WOULD CONSTITUTE A USURPATION OF A LEGISLATIVE PREROGATIVE AND CONSEQUENTLY WOULD BE INVALID."

IN VIEW OF THIS OPINION, IT APPEARED THAT GRADES OF MILK AND STANDARDS FOR SAME, OTHER THAN THOSE APPEARING IN STATE LAWS, THAT WERE SET UP IN LOCAL MILK ORDINANCES WERE ILLEGAL AND INVALID. IN ITS CAMPAIGN TOWARD "ONE GRADE OF MILK" AND THAT, THE BEST OBTAINABLE, THE NEWARK DEPARTMENT OF HEALTH, HAS DONE ALONG WITH THIS OPINION AND DISCONTINUED THE ENFORCEMENT OF TWO GRADES OF MILK.

## MILK PLANT &amp; DAIRY INSPECTION REPORT

## MILK SUPPLIES

|                       | GRADE A | GRADE B | TOTAL |
|-----------------------|---------|---------|-------|
| CERTIFIED DAIRIES     |         |         |       |
| INSPECTIONS           |         |         | 4     |
| GRADED MILK SUPPLIES  |         |         |       |
| INSPECTIONS           |         |         |       |
| PASTEURIZATION PLANTS | 54      | 57      | 111   |
| RECEIVING PLANTS      | 5       | 66      | 71    |
| DAIRIES               | 780     | 8895    | 9675  |
| RE-INSPECTIONS        |         |         |       |
| PASTEURIZATION PLANTS | 4       | 5       | 9     |
| RECEIVING PLANTS      | 1       | 6       | 7     |
| DAIRIES               | 28      | 539     | 561   |
| MILK PLANTS EXCLUDED  | 0       | 2       | 2     |
| DAIRIES EXCLUDED      | 23      | 286     | 309   |
| MILK (QTS) REJECTED   |         |         |       |
| AT COUNTRY PLANTS     | 3220    | 5,040   | 55263 |

## CREAM SUPPLIES

|                       | METROP. MILK | WEST-SOUTH CREAM | TOTAL |
|-----------------------|--------------|------------------|-------|
|                       | SHED         | SHED             |       |
| INSPECTIONS           |              |                  |       |
| PASTEURIZATION PLANTS | 20           | 10               | 30    |
| RECEIVING PLANTS      | 63           | 2                | 65    |
| DAIRIES               | 6033         | 304              | 7337  |
| RE-INSPECTIONS        |              |                  |       |
| PASTEURIZATION PLANTS | -            | -                | -     |
| RECEIVING PLANTS      | 2            | 0                | 2     |
| DAIRIES               | 145          | 12               | 157   |
| CREAM PLANTS EXCLUDED | 2            | 0                | 2     |
| DAIRIES EXCLUDED      | 156          | 32               | 188   |
| MILK (QTS) REJECTED   |              |                  |       |
| AT COUNTRY PLANTS     | 5800         | 6655             | 22455 |

## DAILY AVERAGE MILK CONSUMPTION IN NEWARK

| POPULATION       | 1940                                  | QUARTS  | PROPORTION |
|------------------|---------------------------------------|---------|------------|
| 429,000          | CERTIFIED - RAW - - - - -             | 984)    | 0.53 %     |
|                  | " - PASTEURIZED - - - - -             | 52)     | 0.03 %     |
| DAILY PER CAPITA | GRADE A PASTEURIZED - GOLDEN GUERNSEY | 2639)   | 23.84 %    |
| 0.87 PINT        | " A " - - - - -                       | 41991)  |            |
|                  | GRADE B PASTEURIZED - - - - -         | 141534  | 75.60 %    |
|                  | TOTAL                                 | 187,200 | 100 %      |

NOTE - A REDUCTION FROM 224,576 QUARTS IN 1939 AND 1 PINT PER CAPITA

## COMPOSITE AVERAGES OF NEWARK'S MILK SUPPLIES

| GRADE OF MILK       | BEFORE | AFTER A PER C.C. | BUTTER-FAT-% | SOLIDS-% |
|---------------------|--------|------------------|--------------|----------|
| CERTIFIED           | 28     | 1,800            | 4.31         | 13.42    |
| GRADE A PASTEURIZED | 921    | 6,600            | 4.22         | 13.16    |
| GRADE B PASTEURIZED | 1,005  | 2,200            | 3.77         | 12.49    |
| GRAND AVERAGE       | 1,954  | 7,900            | 4.9          | 12.82    |



# VETERINARY DIVISION

BERNARD J. DROLET, V. M. D. - CHIEF VETERINARIAN

THE YEAR OF 1940 BROUGHT INTO VOGUE SOME NEW AND REVOLUTIONARY PRACTICES IN THE MEAT INDUSTRY. ONE OF THESE PRACTICES WAS THE USE OF ULTRA-VIOLET RAYS, THE PURPOSE OF WHICH IS TO TENDERIZE THE MEAT. THIS RAY IS SUPPOSED TO BREAK DOWN THE FIBROUS TISSUES, THEREBY MAKING THE MEAT MORE TENDER. THIS SYSTEM WHILE BEING CARRIED OUT BY SOME OF THE LARGE PACKING PLANTS HAS NOT AS YET GAINED GREAT FAVOR. IT COULD BE WORKED FOR WHICH IT WAS DESIGNED, THE GENERAL COMPLAINT IS THAT IT TENDS TO REMOVE MUCH OF THE FLAVOR OF THE MEAT AND CAUSES IT TO BECOME SPONGY.

THE OTHER INNOVATION WAS THAT OF EVisCERATED POULTRY. THIS, WE FEEL IS A GREAT ADVANCE IN THE POULTRY INDUSTRY; AND IF PROGRESS KEEPS AHEAD OF LAST YEAR'S ACTIVITIES IN THIS LINE, IT WILL NOT BE LONG BEFORE EVERY DRESSER OF POULTRY WILL ADOPT THE PRACTICE. IT LEADS TO BETTER SANITATION OF THE EDIBLE CARCASS, PREVENTING THE ABSORPTION OF CERTAIN ELEMENTS FROM THE INTERNAL ORGANS, THEREBY ALLOWING THE PRODUCT TO HAVE A MORE FLAVORABLE AND PLEASING TASTE. IT ALSO HAS ANOTHER ADVANTAGE IN ALLOWING THE PURCHASER TO KNOW BY TRUE CARCASS WEIGHT JUST HOW TO MAKE HER PURCHASE TO SATISFY HER NEED.

IN SOME CASES DRESSERS OF LIVE POULTRY, BESIDES EVisCERATING SAME, MAINTAIN IN THE CITY POULTRY ESTABLISHMENTS WHERE THEY CUT THE EVisCERATED CARCASSES INTO THE SEVERAL PARTS, SUCH AS LEGS, WINGS, BREASTS, BACKS, ETC., ALLOWING THE PURCHASER TO OBTAIN THE DESIRED AMOUNT OF ANY DESIRED PART. THIS PRACTICE IS ALSO SAVING MONEY DAILY.

THERE WAS A CONSIDERABLE SHORTAGE OF CERTAIN MEAT ANIMALS THIS YEAR, DUE TO CHANGEMENTS ABROAD.

A NEW SYSTEM OF PLANT INSPECTION WAS INTRODUCED DUE TO AMENDMENTS TO LAWS AND REGULATIONS. THIS CAUSED A MORE DETAILED INSPECTION IN EACH CASE WHICH OF COURSE IT DID NOT ALLOW FOR AS MANY INDIVIDUAL INSPECTIONS AS IN THE PAST.

## INSPECTIONS

|                           | 1935   | 1936   | 1937   | 1938   | 1939   | 1940   | NO. OF SHOPS |
|---------------------------|--------|--------|--------|--------|--------|--------|--------------|
| BUTCHER SHOPS - - - -     | 27,119 | 28,303 | 24,321 | 23,186 | 33,712 | 22,371 | 710          |
| FISH STORES - - - -       | 4,847  | 4,197  | 4,016  | 4,223  | 5,827  | 3,559  | 127          |
| BOLOGNA KITCHENS - -      | 1,336  | 1,266  | 1,088  | 1,158  | 1,471  | 1,664  | 47           |
| POULTRY SLAUGHTERHOUSES - | 1,827  | 1,575  | 1,554  | 1,881  | 2,197  | 1,580  | 66           |
| WHOLESALE BEEF HOUSES     | 6,306  | 6,444  | 6,335  | 6,167  | 7,102  | 4,874  | 38           |
| " FISH "                  | 1,207  | 1,017  | 869    | 927    | 1,121  | 832    | 11           |
| " LIVE POULTRY "          | 1,548  | 2,348  | 2,526  | 2,212  | 2,651  | 3,044  | 9            |
| PUBLIC MARKETS - - -      | 1,136  | 1,218  | 1,984  | 1,161  | 1,972  | 401    | 33           |
| COMMISSION HOUSES - -     | 528    | 401    | 298    | 173    | -      | -      | *            |
| REFRIGERATING PLANTS      | 64     | 141    | 70     | 30     | 42     | 21     | 1            |
| INSTITUTIONAL MEAT -      | 958    | 676    | 930    | 971    | 1,064  | 751    | 4            |
| " ICE-BOXES               | 454    | 510    | 533    | 457    | 492    | 415    | 4            |
| ABATOIRS - - - - -        | 189    | 137    | 82     | 30     | 56     | 75     | 6            |
| PET SHOPS - - - - -       | -      | 398    | 445    | 424    | 627    | 300    | 20           |
| SPECIAL - - - - -         | 518    | 1,486  | 374    | 489    | 96     | -      | -            |
| BOLOGNA STAMPINGS MADE    | 664    | 971    | 1,465  | 872    | 2,920  | 723    | 9            |

\* COMMISSION HOUSES INCLUDED IN WHOLESALE BEEF HOUSES.



# CITY DISPENSARY

OSCAR STEVENS, CHIEF PHARMACIST --- MELVINA RYAN, R.N., SUPERVISING NURSE

THE CITY DISPENSARY PROVIDES FREE TREATMENT FOR INDIGENT NEWARK RESIDENTS FOR PRACTICALLY EVERY KNOWN PHYSICAL CONDITION. IT ALSO PROVIDES FREE MEDICATION AND HOME VISITS TO BED-RIDDEN PATIENTS. IN ADDITION TO THIS TYPE OF SICK RELIEF, THE DISPENSARY SUPPLIES DISTRICTS OF INSULIN, TOLDO, SCHICK TEST AND VACCINE.

DURING THE YEAR, A SPECIAL CLINIC WAS ESTABLISHED TO DETERMINE EMPLOYABILITY OF RELIEF CLIENTS. A CAREFUL EXAMINATION IS NEEDED IN SUCH CASES AS MANY CLIENTS ENDEAVOR TO PROVE INABILITY TO WORK WHICH IS NOT THE CASE. THE CLINIC ADVISES THE RELIEF DEPARTMENT AS TO TOTAL DISABILITY, TOTAL EMPLOYABILITY OR DEGREE AND TYPE OF EMPLOYABILITY. DURING THE YEAR, WE WERE ALSO FORTUNATE IN SECURING A DENTAL X-RAY MACHINE AND TECHNICAL METHOFORM, DENTAL X-RAYS REQUIRED DELAY AND A VISIT BY THE PATIENT TO THE CITY HOSPITAL.

THE FOLLOWING TABLE SHOWS DISTRIBUTION BY CLINICS OF 117,263 TREATMENTS, AN INCREASE OF 60% OVER 1935. PRESCRIPTIONS NUMBERED 125,259. DURING THE YEAR, THE DISPENSARY ALSO FILLED AND DISTRIBUTED 29,000 BOTTLES OF COD LIVER OIL WITHOUT COST, TO ALL-BABY STORES, PAROCHIAL AND PUBLIC SCHOOLS. DISTRICT DOCTOR CALLS REACHED A NEW HIGH POINT WITH 25,654 COMPARED WITH 24,291 IN 1935. DURING 1935 AND THE EARLY PART OF 1936, THE E.H.A. SUPPLIED DISTRICT DOCTOR SERVICE FOR THOSE ACTUALLY ON RELIEF. THAT ACCOUNTS FOR THE LOW NUMBER OF CALLS MADE BY OUR DOCTORS THOSE YEARS. THE FOLLOWING FIGURES ARE THOSE OF OUR GENERAL TREATMENT CLINICS ONLY. DENTISTS APPEAR ELSEWHERE IN CITY SOCIAL REPORT SHOWING TUBERCULOSIS AND CARDIAC TREATMENTS AND EXAMINATIONS, FOOD HANDLER AND DOMESTIC EXAMINATIONS AND VENEREAL DISEASE TREATMENTS. THE TOTAL INCLUDING ALL SUCH TREATMENTS AND EXAMINATIONS AMOUNTED TO 339,831 COMPARED WITH 385,156 IN 1935.

## CLINIC ATTENDANCE TREATMENTS PER YEAR, 1935-1940

|   | 1935  | 1936  | 1937   | 1938   | 1939   | 1940   |
|---|-------|-------|--------|--------|--------|--------|
| MEDICAL - - - - -                         | 7369  | 21714 | 25810  | 28863  | 33942  | 29927  |
| CHILDREN - - - - -                        | 4338  | 4895  | 4935   | 5692   | 5720   | 4592   |
| SURGICAL - - - - -                        | 8703  | 9802  | 10507  | 11435  | 11305  | 8506   |
| GYNAECOLOGICAL - - - - -                  | 407   | 1536  | 180    | 1238   | 2292   | 1794   |
| SKIN - - - - -                            | 7079  | 6944  | 7030   | 8040   | 6872   | 6081   |
| RECYAL & G.E. - - - - -                   | 3373  | 3591  | 4116   | 5742   | 7145   | 6428   |
| ORTHOPEDIC - - - - -                      | 402   | 4142  | 57     | 5950   | 6142   | 5581   |
| DENTAL - - - - -                          | 11590 | 15253 | 17797  | 25147  | 23566  | 17908  |
| NEURO-PSYCHIATRIC - - - - -               | 939   | 1724  | 1490   | 806    | 2093   | 2046   |
| ESSEX COUNTY HOSPITAL - - - - -           | 536   | 536   | 380    | 386    | 465    | 445    |
| NERVOUS DISEASES - - - - -                | 3291  | 2899  | 3172   | 3765   | 4107   | 3562   |
| METABOLIC - - - - -                       | 5026  | 5145  | 5105   | 5745   | 6027   | 5441   |
| VARICOSE VEINS - - - - -                  | 2085  | 1630  | 1629   | 1904   | 2178   | 2155   |
| VACCINATION - - - - -                     | 27    | 510   | 1181   | 1076   | 1069   | 1100   |
| ALPINE LAMP - - - - -                     | 943   | 883   | 874    | 614    | 745    | 553    |
| MASSAGE & ELECTROTHERAPY - - - - -        | 2327  | 2338  | 2225   | 1793   | 1729   | 1450   |
| HERNIA - - - - -                          | 287   | 371   | 427    | 610    | 727    | 837    |
| CHICK TESTS & IMMUNIZATIONS - - - - -     | -     | 1244  | 899    | 537    | 612    | 471    |
| INSULIN & OTHER INJECTIONS - - - - -      | -     | 3937  | 4076   | 4503   | 3996   | 4089   |
| BLOOD COUNTS - - - - -                    | -     | 357   | 523    | 669    | 788    | 1036   |
| URINALYSIS - - - - -                      | -     | 3776  | 3696   | 4095   | 4093   | 3501   |
| TUMOR, ANEMIA & ULCERS - - - - -          | -     | -     | -      | -      | 311    | 1235   |
| EMPLOYABILITY DIAGNOSTIC CLINIC - - - - - | -     | -     | -      | -      | -      | 6125   |
| TOTAL - - - - -                           | 75059 | 93595 | 103244 | 123097 | 125924 | 117263 |
| DIFFERENT PATIENTS TREATED - - - - -      | 24799 | 27954 | 32055  | 37650  | 37672  | 33557  |
| DISTRICT DOCTOR CALLS - - - - -           | 4709  | 10340 | 18752  | 20656  | 22291  | 25654  |
| PRESCRIPTIONS FILLED - - - - -            | -     | 92980 | 116946 | 122157 | 133661 | 125258 |

NOTE: EYE, EAR, NOSE & THROAT CLINICS NOW AT EYE & EAR INFIRMARY.

## PAROCHIAL SCHOOL MEDICAL INSPECTION

MEDICAL INSPECTION AND HEALTH EDUCATION OF SCHOOL CHILDREN IS SUPPLIED IN THE PUBLIC SCHOOLS BY THE BOARD OF EDUCATION. THIS VITAL WORK FOR THE PAROCHIAL SCHOOL CHILDREN, OF WHICH THERE ARE OVER 12,000 IN TWENTY-NINE DIFFERENT SCHOOLS, IS PROVIDED BY OUR DEPARTMENT WITH A STAFF OF FOURTEEN NURSES. THEY ARE AIDED BY THE PHYSICIANS OF THE CONTAGIOUS DISEASE AND TUBERCULOSIS DIVISIONS, AS WELL AS OUR CITY DISPENSARY CLINICS.

THE WORK INCLUDES PHYSICAL EXAMINATION FOR THE DETECTION AND CORRECTION OF DEFECTS, IMMUNIZATION AND VACCINATION, ENFORCEMENT OF QUARANTINE AND THE TEACHING OF PERSONAL AND PUBLIC HEALTH. OUR VACCINATION RECORD IS ALMOST 100% AND Diphtheria IMMUNIZATION HAS BEEN OVER 99% COMPLETE FOR THE PAST FOUR YEARS. A DETAILED PHYSICAL RECORD FOLLOWS EACH CHILD THROUGH THE SCHOOL SYSTEM.

DURING THE YEAR, 18,036 PHYSICAL EXAMINATIONS WERE MADE, INCLUDING EXAMINATION OF SKIN, TEETH, EYES, EARS, THROAT AND EVIDENCE OF IMPROPER BREATHING AND NUTRITION, TOGETHER WITH PERSONAL HYGIENE. AT LEAST ONE ROUTINE EXAMINATION IS MADE FOR EVERY CHILD EACH YEAR AND TWO IN THE YOUNGER GRADES.

A TOTAL OF 23,202 DEFECTS WERE FOUND. MANY OF THESE DEFECTS WERE QUOTE MILD AND TEMPORARY AND OFTEN ONE INDIVIDUAL WILL HAVE A GREAT NUMBER, I.E., DEFECTIVE FIRST TEETH. ALMOST ONE HALF THE DEFECTS, 10,301 WERE FOR TEETH.

THE NURSES MADE 6,183 CLASS TALKS AND 465 HOME CALLS DURING THE YEAR AND EXCLUDED 835 CHILDREN MOSTLY FOR CONTAGION. A THOROUGH EXAMINATION AND STATEMENT OF HEALTH, WITH CONDITIONS FOUND, IS MADE BY A DEPARTMENT PHYSICIAN.

IN JANUARY, A SUPERVISOR NURSE WAS APPOINTED BY PROMOTIONAL EXAMINATION.

### MEDICAL EXAMINATION

|                            | <u>1940</u> | <u>1939</u> | <u>1938</u> | <u>1937</u> | <u>1936</u> | <u>1935</u> | <u>1934</u> | <u>1933</u> |
|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| TEETH - DEFECT - - - - -   | 10,301      | 10,882      | 11,594      | 10,172      | 9,462       | 10,959      | 10,404      | 11,939      |
| " - CURE - - - - -         | 3,231       | 3,024       | 3,677       | 3,454       | 3,296       | 4,440       | 4,486       | 5,910       |
| NOSE & THROAT - DEFECT - - | 3,226       | 3,042       | 3,085       | 2,762       | 2,366       | 2,554       | 2,547       | 2,293       |
| " - CURE - - - - -         | 1,133       | 791         | 1,004       | 906         | 947         | 1,039       | 1,063       | 1,202       |
| EYE & EAR - DEFECT - - - - | 2,329       | 2,088       | 1,978       | 1,79        | 1,806       | 2,079       | 1,752       | 1,785       |
| " - CURE - - - - -         | 998         | 668         | 756         | 674         | 672         | 908         | 829         | 790         |
| VERMIN - UNCLEAN - DEFECT  | 3,721       | 2,667       | 3,094       | 2,810       | 3,530       | 3,034       | 2,522       | 1,773       |
| " - CURE - - - - -         | 1,188       | 1,212       | 1,350       | 1,502       | 1,722       | 1,601       | 1,794       | 1,293       |
| SKIN - DEFECT - - - - -    | 4,403       | 5,104       | 4,820       | 3,548       | 3,522       | 3,836       | 3,240       | 2,549       |
| " - CURE - - - - -         | 1,995       | 3,128       | 3,238       | 2,579       | 2,646       | 3,235       | 2,666       | 1,821       |
| MENTAL BEHAVIOR - - - - -  | 53          | 14          | 10          | 18          | 5           | 20          | 15          | 42          |
| EXCLUDED - - - - -         | 835         | 958         | 863         | 961         | 1,260       | 1,182       | 1,251       | 1,196       |
| VACCINATIONS - - - - -     | 586         | 749         | 663         | 776         | 677         | 1,031       | 804         | 1,471       |
| SCHOOL TREATMENTS - - - -  | 25,501      | 29,447      | 24,949      | 22,736      | 22,636      | 22,439      | 19,577      | 19,293      |
| CLASS INSPECTION & TALKS - | 6,83        | 6,389       | 6,230       | 6,64        | 6,767       | 6,511       | 6,924       | 6,511       |
| RE-INSPECTIONS - - - - -   | 38,395      | 33,121      | 47,708      | 51,083      | 73,416      | 62,634      | 51,843      | 41,197      |
| PHYSICAL EXAMINATIONS - -  | 18,036      | 28,978      | 21,766      | 20,118      | 22,974      | 23,557      | 21,399      | 21,468      |
| GENERAL HOME CALLS - - -   | 465         | 652         | 782         | 822         | 944         | 1,235       | 1,105       | 1,042       |



# TUBERCULOSIS DIVISION

DR. M. J. FINE, DIRECTOR

THE ACTIVITIES OF THE TUBERCULOSIS DIVISION CONTINUE TO SHOW A GRADUAL INCREASE IN THE AMOUNT OF WORK PROMOTED. THERE HAS BEEN, DURING THE YEAR, AN INCREASE IN BOTH THE MORBIDITY AND MORTALITY RATES. OUR MORTALITY RATE INCREASED FROM 60.3 TO 71.9 AND THE MORBIDITY FROM 1,663 TO 136.6. THIS CAN SOMEWHAT BE ACCOUNTED FOR, BY THE CHANGE IN POPULATION IN THE CITY OF NEWARK WHICH, FROM THE LATEST CENSUS REPORTS, HAS INCREASED FROM 422,000 TO 429,000. ALSO IN 1939, THE NUMBER OF DEATHS FROM 277 IN 1939 TO 309 IN 1940. ALSO IN 1939, THE NUMBER OF CASES REPORTED DURING THE YEAR, 52 MORE CASES BEING REPORTED IN 1940 THAN IN 1939.

THE CAMPAIGN FOR THE DISCOVERY OF EARLY CASES OF TUBERCULOSIS IS CONTINUING AND FLUOROSCOPIC EXAMINATIONS ARE BEING MADE ON ALL SUSPICIOUS INDIVIDUALS. THE NUMBER OF FLUOROSCOPIC EXAMINATIONS MADE IN 1940 WAS 4358. IN ADDITION TO THE FLUOROSCOPIC EXAMINATIONS IN THE "HOLD" IN THE NORTH PART OF THE CITY, WE HAVE ALSO IN THE FEMALE DIVISION OF THE "HOLD" IN THE NORTH PART OF THE CITY, 910 AND IN THE MALE DIVISION, 1,448. THESE WILL LEAD TO CLOSER OBSERVATION AND INCREASED FLUOROSCOPIC OF ALL CASES. DURING THE YEAR, WE HAVE HAD 1,448 FLUOROSCOPIC EXAMINATIONS OF THE NATIONAL YOUTH SERVICE TEST CASES AND 19,512 CASES IN THE "HOLD" IN THE CITY. OUR PURPOSE IS TO DISCOVER CASES AS EARLY AS POSSIBLE WITH THE VIEWPOINT OF INSTITUTING TREATMENT WHICH CAN BE GIVEN AT HOME IN OUR CLINICS, TO AVOID THE NECESSITY OF HOSPITAL EXPENSES.

THE NUMBER OF CASES IN THE PNEUMOTHORAX CLINIC HAS DECREASED FROM 1876 IN 1939 TO 1522 IN THE PAST YEAR. THIS IS THE RESULT OF DISCONTINUING TREATMENT IN A NUMBER OF CASES IN THE PNEUMOTHORAX CLINIC DURING THE YEAR. IT WAS CONSIDERED ADVISABLE TO PERMIT THE RE-EXPANSION OF THE DISEASED LUNG. SEVERAL CASES WERE REFERRED FOR PNEUMOTHORAX AND TUBERCULOSIS, IN A NUMBER OF CASES, TREATMENT WAS DISCONTINUED DUE TO THE HEALING AND INACTIVITY OF TUBERCULOUS LESIONS.

THE OUTLYING CLINICS HAVE SHOWN AN INCREASE IN THE NUMBER OF CASES EXAMINED AND IN THE "HOLD" IN THE NORTH PART OF THE CITY, WE HAVE ALSO IN THE "HOLD" IN THE FEMALE DIVISION, 910 AND IN THE MALE DIVISION, 1,448. SEVERAL NEW CASES DISCOVERED. IN THE PAST YEAR WE ADDED ANOTHER CLINIC, THE PENNINGTON COURT, WHERE A NUMBER OF EXAMINATIONS WERE MADE SINCE THE CLINIC WAS INSTITUTED.

THE HAY FEVER AND ASTHMA CLINIC HAS MADE RAPID STRIDES AND WE EXAMINED 2145 CASES IN 1940 AS COMPARED WITH 1834 IN 1939. THE SAME HAS OCCURRED IN THE CARDIAC CLINIC WHERE ALMOST TWICE AS MANY CASES WERE TREATED. THERE WERE 2401 CASES IN 1940 AS COMPARED WITH 1344 IN 1939.

WE HAVE CONTINUED TO LANTOUX TEST A LARGE NUMBER OF CHILDREN IN CO-OPERATION WITH THE SCHOOLS OF THE CITY OF NEWARK. IN ADDITION TO THE MANTOUX TEST WE USE THE PATCH TEST. THIS TEST IS ADVISABLE WHERE INJECTIONS CANNOT BE GIVEN FOR SOME REASON OR OTHER.

DURING THE PAST YEAR A CAMP FOR CHILDREN WAS AGAIN INSTITUTED AT THE VERONA HOME, THE RESULT OF WHICH SHOWED AN INCREASE IN CASES DETECTED IN VERONA. IN 1940 WE EXAMINED 2391 AND IN 1939, ONLY 737.

WITH NO INCREASE IN FORCE WE HAVE TREATED AND EXAMINED 57,112 CASES IN 1940 AS COMPARED WITH 54,779 IN 1939. HOME VISITS, HOWEVER, DECREASED FROM 15,246 TO 13,741.

## DEATHS (LAPSE OF TIME AFTER REPORT OF CASE)

|  |     |        |
|--|-----|--------|
| NO. CASES REPORTED ONE YEAR PRIOR TO DEATH | 151 | 48.87% |
| " " " TWO " " " "                          | 26  | 8.41   |
| " " " THREE " " " "                        | 10  | 3.24   |
| " " " 4 & UP " " " "                       | 46  | 14.89  |
|  | 233 | 75.41% |
| " " " 1-7 DAYS AFTER DEATH                 | 64  | 20.71  |
| " " " 8-15 " " " "                         | 6   | 1.94   |
| " " " 1 MONTH " " " "                      | 6   | 1.94   |
|  | 76  | 24.59% |

## TUBERCULOSIS STATISTICS - WHITE AND COLORED

| YEAR | POPULATION |         | REPORTED CASES |     | DEATHS |     | MORBIDITY RATE |       | DEATH RATE |       |
|------|------------|---------|----------------|-----|--------|-----|----------------|-------|------------|-------|
|      | WHITE      | COLORED | WHT            | COL | WHT    | COL | WHT            | COL   | WHT        | COL   |
| 1931 | 405,000    | 40,000  | 793            | 289 | 251    | 155 | 71.1           | 722.0 | 62.0       | 387.5 |
| 1932 | 410,000    | 40,000  | 532            | 245 | 95     | 165 | 129.7          | 612.6 | 47.6       | 412.5 |
| 1933 | 412,000    | 40,000  | 513            | 230 | 227    | 154 | 124.5          | 575.0 | 55.1       | 385.0 |
| 1934 | 414,000    | 40,000  | 447            | 217 | 186    | 124 | 107.9          | 542.5 | 44.9       | 310.0 |
| 1935 | 415,000    | 40,000  | 431            | 220 | 189    | 124 | 104.8          | 540.0 | 45.5       | 310.0 |
| 1936 | 415,000    | 42,000  | 429            | 213 | 182    | 163 | 105.7          | 507.1 | 43.8       | 388.0 |
| 1937 | 415,000    | 43,000  | 385            | 186 | 187    | 112 | 92.8           | 432.5 | 45.0       | 260.4 |
| 1938 | 415,000    | 43,000  | 395            | 203 | 154    | 131 | 95.2           | 472.0 | 37.1       | 304.6 |
| 1939 | 415,000    | 44,000  | 350            | 179 | 155    | 117 | 84.3           | 406.8 | 37.3       | 265.9 |
| 1940 | 384,000    | 45,000  | 400            | 185 | 169    | 138 | 104.2          | 411.1 | 44.0       | 306.6 |

## TUBERCULOSIS MORTALITY AND MORBIDITY -- ALL FORMS

| YEAR | POPULATION | NO. DEATHS | CASES REPORTED | MORTALITY | MORBIDITY |
|------|------------|------------|----------------|-----------|-----------|
| 1931 | 445,000    | 410        | 988            | 92.2      | 221.1     |
| 1932 | 450,000    | 360        | 785            | 80.0      | 174.4     |
| 1933 | 452,000    | 388        | 757            | 85.8      | 167.5     |
| 1934 | 454,000    | 316        | 670            | 69.6      | 147.6     |
| 1935 | 455,000    | 316        | 654            | 69.5      | 143.7     |
| 1936 | 457,000    | 346        | 645            | 75.7      | 141.1     |
| 1937 | 458,000    | 301        | 575            | 65.8      | 125.5     |
| 1938 | 458,000    | 287        | 600            | 62.6      | 131.1     |
| 1939 | 459,000    | 277        | 534            | 60.3      | 116.3     |
| 1940 | 429,000    | 309        | 586            | 71.9      | 136.6     |

\* DIFFERENCE IN TOTALS BY COLOR, IS DUE TO A FEW YELLOW CASES AND DEATHS.

## TYPE OF DIVISIONAL WORK

|  | 1940   | 1939   |
|--|--------|--------|
| VISITS BY NURSES - - - - -                                 | 13,527 | 15,079 |
| INVESTIGATIONS BY NURSES - - - - -                         | 214    | 167    |
| TOTAL  | 13,741 | 15,246 |
| FOOD HANDLERS EXAMINED - - - - -                           | 32,125 | 30,413 |
| ADULTS AND CHILDREN (WHITE) - - - - -                      | 5,406  | 6,234  |
| FLUOROSCOPIC EXAMINATIONS - - - - -                        | 4,358  | 4,533  |
| ADULTS AND CHILDREN (COLORED) INC. HORTON ST. - - - - -    | 3,983  | 4,485  |
| CARDIAC CLINIC - - - - -                                   | 2,401  | 1,344  |
| CAMP CHILDREN EXAMINED - - - - -                           | 2,391  | 737    |
| HAY FEVER & ASTHMA CLINIC - - - - -                        | 2,145  | 1,834  |
| PNEUMOTHORAX CLINIC - - - - -                              | 1,522  | 1,876  |
| PAROCHIAL SCHOOL CHILDREN EXAMINED - - - - -               | 1,379  | 1,975  |
| FOOD HANDLER RE-EXAMINATIONS - - - - -                     | 493    | 485    |
| IRONBOUND CLINIC - - - - -                                 | 395    | 387    |
| CUTLER CLINIC - - - - -                                    | 254    | 239    |
| BOY SCOUTS EXAMINED - - - - -                              | 123    | -      |
| PENNINGTON COURT CLINIC - - - - -                          | 38     | -      |
| DOMESTIC RE-EXAMINATIONS - - - - -                         | 99     | 237    |
| FLUOROSCOPIC EXAMINATIONS (VYA) - - - - -                  | 402    | -      |
| FLUOROSCOPIC EXAMINATIONS (ST. VINCENT'S SCHOOL) - - - - - | 194    | -      |
| MANTOUK TESTS MADE AT CLINIC - - - - -                     | 1,004  | 1,172  |
| NO. EXAMINED VERONA CLINIC - - - - -                       | 573    | 600    |
| " " GLEN GARDNER CLINIC - - - - -                          | 350    | 490    |
| " " FARMINGDALE CLINIC - - - - -                           | 8      | 8      |
| " " SOMER CLINIC - - - - -                                 | 2      | 4      |
| " DOMESTICS REJECTED (TB) - - - - -                        | 16     | 4      |
| " FOOD HANDLERS REJECTED (TB) - - - - -                    | 3      | 5      |
| " TEMPORARY CARDS ISSUED (TB - DOM) - - - - -              | 10     | -      |
| " " " (TB - F H) - - - - -                                 | 8      | -      |



# DIVISION OF CHILD HYGIENE

DR. JULIUS LEVY, DIRECTOR

## STATISTICAL SUMMARY

1940 INFANT MORTALITY RATE

INFANT MORTALITY 35.1 PER 1,000 BIRTHS

(LOWEST EVER RECORDED)

|   |       |
|---|-------|
| A. DEATHS UNDER ONE YEAR PER 1,000 BIRTHS - - - - -   | 35.1  |
| B. DEATHS UNDER ONE MONTH PER 1,000 BIRTHS - - - - -  | 24.7  |
| C. STILLBIRTHS PER 1,000 DELIVERIES - - - - -         | 23.6  |
| D. PUERPERAL DEATHS PER 1,000 DELIVERIES - - - - -    | 3.9   |
| E. TOTAL BIRTHS - - - - -                             | 8,538 |
| TOTAL BIRTHS DELIVERED IN HOSPITALS - - - - -         | 7,952 |
| TOTAL BIRTHS ATTENDED BY MIDWIVES - - - - -           | 185   |
| TOTAL BIRTHS ATTENDED BY PHYSICIANS AT HOME - - - - - | 401   |
| TOTAL DEATHS UNDER ONE YEAR - - - - -                 | 300   |
| TOTAL DEATHS UNDER ONE MONTH - - - - -                | 21    |
| TOTAL STILLBIRTHS - - - - -                           | 206   |
| TOTAL PUERPERAL DEATHS - - - - -                      | 29    |

## ACTIVITIES

THE ACTIVITIES OF THE DIVISION OF CHILD HYGIENE ARE CONCERNED PRIMARILY WITH THE EDUCATION OF MOTHERS IN THE CARE AND MANAGEMENT OF THEIR INFANTS. THROUGH THE DELIVERY OF BIRTH CERTIFICATES THE NURSES VISIT ALL MOTHERS AS SOON AFTER THE BIRTH OF THEIR INFANTS AS IS PRACTICAL. SINCE OVER 90% OF ALL MOTHERS IN BOSTON ARE DELIVERED IN HOSPITALS, THE NURSES DO NOT VISIT THEM UNTIL ABOUT THE TENTH DAY AFTER DELIVERY, EXCEPT IN THOSE INSTANCES WHERE THE MOTHERS WERE DELIVERED AT HOME BY MIDWIVES.

ALL MOTHERS ARE URGED TO PLACE THEIR INFANTS UNDER REGULAR MEDICAL SUPERVISION. WHEN IT APPEARS THAT MOTHERS CANNOT AFFORD TO TAKE THEIR INFANTS TO PRIVATE PHYSICIANS, THEY ARE ADVISED TO BRING THEIR BABIES REGULARLY TO THE BABY-KEEP-WELL STATIONS IN THEIR NEIGHBORHOOD.

DURING THE FIRST MONTH OF THE BABY'S LIFE THE NURSE VISITS EACH WEEK, AND THEREAFTER ONCE A MONTH DURING THE FIRST YEAR, AND EVERY THREE MONTHS DURING THE SECOND YEAR. AT HER FIRST VISIT SHE INSPECTS PARTICULARLY THE BABY'S EYES AND IF ANY DISCHARGE IS PRESENT, SHE TAKES A SMEAR, WHICH IS SENT TO THE LABORATORY. THOUGH THIS PROCEDURE SEVERAL CASES OF SERIOUS INFECTION OF THE EYES HAVE BEEN DISCOVERED AND THE INFANTS PLACED UNDER PROPER MEDICAL CARE. WHEN THESE CASES ARE OF GONORRHEAL ORIGIN, THEY ARE REFERRED TO THE VENEREAL DISEASE BUREAU FOR APPROPRIATE FOLLOW-UP FOR VENEREAL DISEASE CONTROL.

THE NURSES NOT ONLY URGE MOTHERS TO HAVE THEIR INFANTS IMMUNIZED AND VACCINATED BEFORE THE BABIES ARE ONE YEAR OLD, BUT ASSIST IN THE IMMUNIZATION AT THE BABY STATIONS OF THOSE INFANTS WHOSE MOTHERS CANNOT AFFORD TO HAVE IT DONE BY THEIR PRIVATE PHYSICIANS.

IT HAS BEEN FOUND DESIRABLE TO HAVE NURSES CONTINUE VISITING MOTHERS, EVEN THOUGH THEY VISIT A PRIVATE PHYSICIAN, IN ORDER TO MAKE SURE THAT THE MOTHER UNDERSTAND AND FOLLOW OUT THE INSTRUCTIONS GIVEN THEM BY THE DOCTOR IN HIS OFFICE OR AT THE BABY-STATION. SHE MAY NEED TO GIVE A DEMONSTRATION BATH, OR TEACH THE PROPER MAKING OF A BED, THE PROPER PLACING OF AN INFANT OUTDOORS TO RECEIVE THE BENEFIT OF THE SUN, THE PROPER CARE AND ADMINISTRATION OF COD LIVER OIL, AND MANY OTHER PHASES

OF INFANT CARE. THERE IS NO REASON TO BELIEVE THAT ONLY LOW-WAGE GROUP MOTHERS PROFIT FROM THE REGULAR VISITS AND ADVICE OF PROPERLY TRAINED AND SUPERVISED MATERNAL AND CHILD HEALTH NURSES.

IN RECENT YEARS THE NURSE HAS LEARNED TO INCORPORATE INTO HER INSTRUCTIONS ON PHYSICAL CARE OF INFANTS SUGGESTIONS TO MOTHERS IN REGARD TO PARENT-CHILD RELATIONSHIPS AND MENTAL HYGIENE. IT SEEMS REASONABLE TO BELIEVE THAT MOTHERS' ATTITUDES CAN BE INFLUENCED THROUGH OPPORTUNITIES FOR DISCUSSING THEIR IDEAS ABOUT THE CHILD AND TRAINING OF THE INFANTS WITH A PROPERLY TRAINED AND INFORMED PUBLIC HEALTH NURSE. IF THE NURSE SUCCEEDS ONLY IN REMOVING MANY OF THE FEARS AND ANXIETIES WHICH BESET YOUNG MOTHERS, SHE WILL UNDOUBTEDLY HELP THEM TO MAKE BETTER ADJUSTMENTS.

THE NURSE IN HER REGULAR VISITS TO FAMILIES DISCOVERS MANY SITUATIONS AND PROBLEMS WHICH NEED TO BE REFERRED TO OTHER AGENCIES AND BUREAUS. DURING THE PAST YEAR THE NURSES HAVE BEEN REFERRING TO THE HOUSING AUTHORITY ESPECIALLY THE NEED FOR BETTER HOUSING ACCOMMODATIONS. THE HOUSING AUTHORITY HAS RECOGNIZED THAT OUR NURSES ARE IN AN EXCELLENT POSITION TO SELECT THE MOST NEEDY AND DESERVE SPECIAL ATTENTION THROUGH THE CLOSE CONTACT AND ASSOCIATION WITH FAMILIES ON RELIEF OR WPA THEY HAVE AN OPPORTUNITY OF INTERPRETING TO THESE FAMILIES OTHER PUBLIC AGENCIES, AND ALSO CAN BRING TO THE ATTENTION OF SOME OF THESE AGENCIES SPECIAL SITUATIONS WHICH SHOULD RECEIVE SPECIAL CONSIDERATION. THERE HAS BEEN A VERY CLOSE COOPERATION BETWEEN THE DEPARTMENT OF PUBLIC WELFARE AND OUR NURSES.

AB-WELFARE - LUN STATIONS ONLY MOTHERS WHO CANNOT AFFORD TO TAKE THEIR INFANTS REGULARLY TO A PRIVATE PHYSICIAN ARE RECOMMENDED TO COME TO THE BABY-STATIONS. SUITABLE SOCIAL INVESTIGATION CARDS ARE FILLED OUT BY THE NURSE AND SUBMITTED TO THE DOCTOR AT THE STATION. HE MUST APPROVE OF THE MOTHER ATTENDING THE STATION, BEFORE SHE IS ALLOWED TO COME REGULARLY.

ALL INFANTS ARE WEIGHED ON EACH VISIT. MOST INFANTS ARE BROUGHT TO THE STATION TWICE A MONTH. THE DOCTOR EXAMINES THEM CAREFULLY IN REGARD TO THEIR GROWTH, DEVELOPMENT, AND NUTRITION. SINCE NO SICK CHILDREN ARE ADMITTED TO THE STATIONS, IT HAS BEEN FOUND UNNECESSARY, AND EVEN INADVISABLE, TO HAVE THE DOCTOR MAKE A COMPLETE EXAMINATION, THAT IS, INCLUDING THE USE OF INSTRUMENTS.

WHILE THE PRIMARY PURPOSE OF THE VISIT TO THE STATION IS TO HAVE THE DOCTOR REGULATE THE FEEDING, SO THAT GASTRO-INTESTINAL DISTURBANCES WILL BE PREVENTED AND NORMAL GROWTH AND DEVELOPMENT MAINTAINED, THE INSTRUCTION TO MOTHERS IN THE GENERAL CARE AND MANAGEMENT OF THEIR BABIES IS CONSIDERED ALMOST EQUAL IN IMPORTANCE. THIS MAY BE EXPLAINED BY SAYING THAT WE ARE NOT SATISFIED MERELY BY NORMAL GAIN IN WEIGHT. THE UNDERSTANDING BY THE MOTHER OF A CHILD'S GROWTH AND DEVELOPMENT IS CONSIDERED AN ESSENTIAL FUNCTION OF THE PHYSICIAN'S SUPERVISION.

THE NURSE BRINGS TO THE DOCTOR'S ATTENTION CERTAIN PHASES OF THE INFANT'S CARE WHICH SHE WOULD LIKE TO HAVE HIM EMPHASIZE AND HE, IN TURN, HAS AN OPPORTUNITY TO CALL THE ATTENTION OF THE NURSE TO CERTAIN PHASES WHICH HE THINKS IT IS NECESSARY FOR HER TO EMPHASIZE IN THE HOME. OUR EXPERIENCE WITH THE EDUCATION OF THE MOTHER IN THE MANAGEMENT AND CARE OF HER INFANT CLEARLY INDICATES THAT THE INSTRUCTIONS OF THE PHYSICIAN AT THE STATION MUST BE SUPPLEMENTED AND ELABORATED IN THE HOME TO BE EFFECTIVE. THIS IS POINT CLEARLY TRUE, FOR ONE MUST TRY TO INCLUDE THE MENTAL HYGIENE AND PARENT-CHILD RELATION ASPECTS OF EARLY NURTURE. THE RECORDS OF INFANTS WHO ARE FOUND NOT TO BE MAKING PROPER PROGRESS WITHIN THREE WEEKS ARE REFERRED TO THE MAIN OFFICE FOR SPECIAL REVIEW.

THE PHYSICIAN IS EXPECTED FURTHER TO EDUCATE THE MOTHERS THROUGH GROUP DISCUSSIONS. FOR THIS PURPOSE A SERIES OF TOPICS, WHICH LEND THEMSELVES READILY TO FIVE-MINUTE DISCUSSION, HAVE BEEN PREPARED FOR THE PHYSICIANS.

RECENTLY WE HAVE BEEN EXPERIMENTING WITH THE "TRUE AND FALSE CONTEST" METHOD. A SPECIAL SERIES OF QUESTIONS DEALING WITH ALL PHASES OF INFANT CARE HAVE BEEN PREPARED, FROM WHICH THE PHYSICIAN SELECTS FIVE OR TEN QUESTIONS FOR EACH OF A GROUP OF MOTHERS AT THE STATION. THE RESULTS HAVE BEEN RATHER INTERESTING AND ENCOURAGING. IN A REVEAL TO THE PHYSICIAN HOW MUCH OR LITTLE THE MOTHER HAS LEARNED FROM HIS TEACHINGS AND ALSO GIVES HIM AN OPPORTUNITY TO MODIFY OR ELABORATE THE ANSWERS GIVEN BY THE MOTHERS.

IF ANY INFANT PRESENTS A CONDITION WHICH REQUIRES CAREFUL EXAMINATION OR MEDICATION, HE IS REFERRED TO A PHYSICIAN OR CLINIC. THIS WOULD APPLY TO A CONDITION LIKE PYLORIC STENOSIS. IT IS VERY ENCOURAGING TO FIND THAT TODAY INFANTS WITH EVEN SLIGHT PHYSICAL DISTURBANCES ARE NOT BROUGHT TO THE STATIONS FOR DIAGNOSIS OR TREATMENT. THE MOTHERS HAVE LEARNED THAT THEY ARE, IN TRUTH, BABY-KEEP-WELL STATIONS, WHERE IT IS WELL WORTH WHILE TO COME FOR ADVICE AND GUIDANCE IN PREVENTION RATHER THAN CURE.

THERE ARE THIRTY-THREE CONSULTATIONS HELD EACH WEEK AT THE SEVENTEEN BABY-KEEP-WELL STATIONS. WHILE MOST OF THEM ARE IN THE CONGESTED AND MORE NEEDY AREAS, OUTSIDE OF TWO WARDS, STATIONS ARE FOUND THROUGHOUT THE CITY. WITH THE DEVELOPING OF THE HOUSING PROJECTS IT HAS BEEN POSSIBLE TO ESTABLISH BABY-STATIONS IN THE NEW BUILDINGS. THIS, OF COURSE, ADDS TO THE CONVENIENCE AND COMFORT OF THE FAMILIES WHO LIVE IN THE NEW HOUSES.

#### TRAINING OF STAFF PHYSICIANS

THE EDUCATION OF MOTHERS IN THE PROPER CARE, MANAGEMENT, AND FEEDING OF INFANTS MAY BE CONSIDERED ALMOST A SPECIAL FIELD. EVEN EXPERENCED PEDIATRICIANS, WHO ARE EXPERT IN THE DIAGNOSIS AND TREATMENT OF DISEASE, REQUIRE SPECIAL TRAINING TO ACQUIRE THE ART OF TEACHING MOTHERS IN THIS FIELD. FOR THIS PURPOSE THE DIRECTOR AND AN ASSISTANT MAKE FREQUENT VISITS TO THE BABY-STATIONS. OPPORTUNITIES ARE HERE PRESENTED FOR POINTING OUT THE THINGS TO LOOK FOR, THE THINGS TO TALK ABOUT, AND SOMETHING OF THE ART OF ELICITING A TRUE PICTURE OF THE MOTHERS' ATTITUDES AND METHODS OF HANDLING VARIOUS PHASES OF CHILD CARE.

STAFF CONFERENCES ARE HELD ONCE A MONTH. WHILE THE DISCUSSIONS DEAL LARGE-LY WITH THE SIMPLE MATTERS OF CARE AND MANAGEMENT OF CHILDREN, IT IS WORTH REPORTING THAT THOUGH THESE CONFERENCES HAVE BEEN HELD OVER A LONG PERIOD OF YEARS, CONSIDERABLE INTEREST IS SHOWN IN THE ART OF TEACHING MOTHERS THE FACTS WHICH ARE GENERALLY WELL KNOWN TO ALL. EFFORTS ARE ALWAYS MADE TO REACH AN AGREEMENT ON WHAT IS BEING TAUGHT MOTHERS AND HOW IT IS TO BE DONE. IN THIS WAY NEW MEMBERS OF THE STAFF ACQUIRE AN UNDERSTANDING OF THE DIFFERENCE BETWEEN PRIVATE PRACTICE, WHICH CAN BE ENTIRELY INDIVIDUALISTIC, AND THE EDUCATION OF A COMMUNITY THROUGH GREATER AMOUNT OF UNIFORMITY.

#### TRAINING OF STAFF - NURSES

THE IN-STAFF EDUCATION AND TRAINING OF NURSES IS DEVELOPED ON SOMEWHAT SIMILAR LINES. WHEN FIRST INTRODUCED INTO THE DIVISION, THE NURSES ARE REQUIRED TO SPEND FOUR WEEKS WITH A NURSE SELECTED NOT ONLY FOR HER EXPERIENCE BUT ALSO FOR HER ABILITY TO TEACH. THE WORK IS REVIEWED WITH HER BY THE SUPERVISOR OF NURSES WHO, AFTER PLACING HER IN A DISTRICT, FREQUENTLY MAKES VISITS WITH HER IN THE HOMES. SHE IS, OF COURSE, UNDER THE CONTINUOUS INFLUENCE OF HER CONTACT WITH THE BABY-STATION, WHERE SHE HAS AN OPPORTUNITY, BY LISTENING TO THE DOCTOR, OF LEARNING ABOUT THINGS WHICH HE CONSIDERS IMPORTANT FOR THE BABY.

THE SUPERVISOR OF NURSES THEN HOLDS CONFERENCES WITH ALL THE NURSES ONCE A MONTH, WHERE IMPORTANT PHASES OF CHILD HYGIENE ARE PRESENTED TO THEM FOR INFORMATION AND DISCUSSION.

THE NURSES ARE REQUIRED TO TAKE COURSES NOW GIVEN AT OUR STATE TEACHERS COLLEGE ON THE "HISTORY OF CHILD HYGIENE AND THE UNDERSTANDING, CARE, AND MANAGEMENT OF INFANTS AND CHILDREN". THESE COURSES DEVOTE A CONSIDERABLE AMOUNT OF TIME TO PARENT-CHILD RELATIONSHIP AND MENTAL HYGIENE. ALL THE NURSES TAKE THESE COURSES REPEATEDLY TWO TIMES IN A MONTH ON VARIOUS ASPECTS OF MENTAL HYGIENE, AND THESE ACTIVITIES ARE USED FOR DISCUSSION AT THE MONTHLY CONFERENCES. IN ADDITION, THE SUPERVISOR IN PARENT-CHILD RELATIONSHIPS OF THE STATE BUREAU OF MATERNAL AND CHILD HEALTH CONDUCTS GROUP DISCUSSIONS WITH THE NURSES WHO HAVE COMPLETED THESE SPECIAL COURSES.

AS A FURTHER MEANS OF EDUCATION AND TRAINING THE SUPERVISOR AND SELECTED NURSES ARE ENCOURAGED TO ATTEND ALL SPECIAL CONFERENCES RELATED TO OUR FIELD OF ACTIVITY.

#### DISTRIBUTION OF COD LIVER OIL

SINCE IT IS VERY IMPORTANT THAT ALL BABIES RECEIVE COD LIVER OIL DURING THE WINTER MONTHS BECAUSE OF ITS VITAMIN D CONTENT BEING A PREVENTIVE OF RICKETS, COD LIVER OIL IS DISTRIBUTED FREE AT THE BABY-STATIONS TO THOSE MOTHERS WHO CANNOT AFFORD TO BUY IT. DURING 1940 THE NURSES GAVE OUT 16,612 BOTTLES OF THE OIL TO THE MOTHERS,

# BOARDING HOMES

SINCE 1915 ALL PERSONS IN NEWARK BOARDING INFANTS ARE REQUIRED TO OBTAIN A LICENSE FROM THE DEPARTMENT OF HEALTH. THIS HAS SERVED THE PURPOSES FOR WHICH IT WAS INTENDED: FIRST, TO PREVENT BABY-FARMS FROM DEVELOPING, SECOND, TO MAKE AVAILABLE A LIST OF PROPERLY LICENSED PERSONS TO THOSE WHO MAY HAVE NEED FOR BOARDING OUT THEIR INFANTS.

RECENTLY, APPLICANTS HAVE BEEN REQUIRED TO SUBMIT A CERTIFICATE FROM A PHYSICIAN CERTIFYING THAT THEY ARE FREE FROM COMMUNICABLE DISEASE AND ARE IN GOOD HEALTH. IF THE WOMAN INDICATES THAT SHE CANNOT AFFORD TO PAY FOR THIS EXAMINATION, IT CAN BE OBTAINED AT THE HEALTH DEPARTMENT.

IT HAS BEEN OUR PRACTICE NOT TO INVESTIGATE HOMES FOR LICENSING WHICH ARE RECOMMENDED BY PRIVATE AGENCIES. THE LICENSE IS ISSUED ON THE RECOMMENDATION OF A PRIVATE AGENCY AND THE LISTING IS RESERVED ONLY FOR THE AGENCY MAKING THE RECOMMENDATION. ALL PERSONS REQUESTING BOARD HOMES ARE REFERRED TO THE PRIVATE AGENCIES.

THE NURSES VISIT MONTHLY ALL LICENSED HOMES IN WHICH THERE ARE INFANTS UNDER ONE YEAR OF AGE. THOSE HOMES IN WHICH CHILDREN FROM TWO TO FIVE YEARS ARE BOARDED ARE VISITED BY THE NURSES ONCE EVERY THREE MONTHS. ALL HOMES BOARDING INFANTS UNDER ONE YEAR OF AGE MUST SATISFY THE NURSE THAT THE INFANT IS UNDER THE CARE EITHER OF A PHYSICIAN OR A BABY-STATION.

EDUCATIONAL TREATMENT. A LIMITED AND AT OF L TREATMENT IS OFTEN THE ONLY WAY TO WITH RES. IT IS OUR EXPERIENCE THAT IN THIS GROUP OF MOTHERS THE WRITTEN WORD IS NOT VERY EFFECTIVE. IT HAS BEEN FOUND THAT IF WE DESIRE REALLY TO INFLUENCE THEIR CONCEPTS, TO REMOVE SUPERSTITIONS, FEARS, AND ANXIETIES, CONSIDERABLE AND REPEATED CONVERSATIONS AND DISCUSSIONS WITH OUR NURSES ARE NECESSARY.

GENERAL RESULTS. GENERAL RESULTS ARE USUALLY MEASURED BY THE LOW INFANT MORTALITY RATES. I DO NOT THINK, HOWEVER, THAT THIS GIVES THE TRUE PICTURE. THE RESULTS IN THIS WORK MUST BE MEASURED BY THE PROMOTION OF HEALTH, PHYSICAL, MENTAL AND EMOTIONAL. WHILE THE PROMOTION OF PHYSICAL HEALTH CAN BE OBTAINED WITHOUT TOO MUCH UNDERSTANDING OF GROWTH AND DEVELOPMENT OF INFANTS, THIS IS NOT TRUE OF THE PROMOTION OF MENTAL AND EMOTIONAL HEALTH. WE HAVE REASON TO BELIEVE THAT THE MOTHERS HAVE ACQUIRED THAT TYPE OF UNDERSTANDING WHICH ELIMINATES MANY OF THE FEARFUL AND ANXIETY, AND FEELS THAT THE CHILD IS IN THE BEST OF CARE. CON- DUCTIVE TO MORE WHOLESOME EMOTIONAL AND MENTAL DEVELOPMENT. THIS, IF POSSIBLE, IS A GREATER ACCOMPLISHMENT THAN MERELY REDUCING INFANT MORTALITY RATES.

PREGNANT ACTIVITIES. DURING THE YEAR, THE NEW YORK STATE, 35 HOW MANY AND MOTHERS PAID 24,597 VISITS TO THE STATIONS WITH THE R. LAB ES. 5,364 NEW BABIES WERE SUPPLIED WHO A TOTAL OF 13,590 DIFFERENT BABIES WERE UNDER SUPERVISION (UNDER 2 YEARS OF AGE).

## PUERPERAL DEATHS - STILL BIRTHS & OTHER SPECIAL DATA

| YEAR | TOTAL | PUERPERAL DEATHS                   |       | PUER. MORT. PER 1,000 DEL. |                      | BIRTHS |                      | PERCENT OF BIRTHS ATTENDED BY MIDWIVES | STILLBIRTHS | STILLBIRTH RATE PER 1,000 DEL. |
|------|-------|------------------------------------|-------|----------------------------|----------------------|--------|----------------------|--|-------------|--------------------------------|
|      |       | MIDWIVES IN ATTENDANCE AT ANY TIME | TOTAL | TOTAL                      | ATTENDED BY MIDWIVES | TOTAL  | ATTENDED BY MIDWIVES |  |             |                                |
| 1914 | 87    | 10                                 | 7.5   | 3.1                        | 10,448               | 3,451  | 28.5%                | 502                                    | 42.0        |                                |
| 1915 | 87    | 20                                 | 7.7   | 7.1                        | 10,852               | 2,799  | 25.8%                | 466                                    | 41.2        |                                |
| 1916 | 71    | 11                                 | 6.5   | 4.4                        | 10,460               | 2,502  | 23.9%                | 437                                    | 40.1        |                                |
| 1917 | 76    | 8                                  | 7.3   | 3.4                        | 10,042               | 2,338  | 23.3%                | 436                                    | 41.5        |                                |
| 1918 | 69    | 9                                  | 6.7   | 4.5                        | 9,801                | 2,990  | 20.3%                | 385                                    | 37.6        |                                |
| 1919 | 58    | 4                                  | 5.1   | 2.5                        | 9,965                | 1,724  | 17.3%                | 416                                    | 37.0        |                                |
| 1920 | 67    | 15                                 | 6.6   | 10.0                       | 9,824                | 1,495  | 15.2%                | 367                                    | 36.0        |                                |
| 1921 | 34    | 0                                  | 3.4   | -                          | 9,506                | 1,191  | 12.5%                | 397                                    | 40.1        |                                |
| 1922 | 40    | 3                                  | 4.4   | 3.1                        | 8,782                | 953    | 10.9%                | 340                                    | 37.3        |                                |
| 1923 | 29    | 0                                  | 3.5   | -                          | 7,897                | 716    | 9.1%                 | 308                                    | 37.5        |                                |
| 1924 | 41    | 1                                  | 5.2   | 1.6                        | 7,565                | 625    | 8.3%                 | 256                                    | 32.7        |                                |
| 1925 | 35    | 2                                  | 4.4   | 3.2                        | 7,638                | 515    | 6.7%                 | 276                                    | 34.9        |                                |
| 1926 | 29    | 1                                  | 3.9   | 2.3                        | 7,235                | 433    | 6.0%                 | 233                                    | 31.2        |                                |
| 1927 | 23    | 4                                  | 2.9   | 10.7                       | 7,659                | 374    | 4.9%                 | 240                                    | 30.4        |                                |
| 1928 | 23    | 0                                  | 2.8   | -                          | 7,936                | 283    | 3.6%                 | 247                                    | 29.8        |                                |
| 1929 | 30    | 3                                  | 3.7   | 12.8                       | 7,950                | 234    | 2.9%                 | 230                                    | 28.1        |                                |
| 1930 | 29    | 1                                  | 3.3   | 5.4                        | 8,538                | 185    | 2.2%                 | 206                                    | 23.6        |                                |

## DEATHS UNDER ONE YEAR BY CAUSE

| YEAR | MEASLES | BRONCHITIS | PNEUMONIA | MENTINGITIS | DIARRHOEA | OTHER<br>CONTAGION | CONGENITAL<br>DEBIL. ETC | ALL OTHERS | TOTAL |
|------|---------|------------|-----------|-------------|-----------|--------------------|--------------------------|------------|-------|
| 1916 | 23      | 35         | 122       | 24          | 196       | 86                 | 435                      | 85         | 1024  |
| 1917 | 0       | 72         | 121       | 26          | 250       | 50                 | 430                      | 86         | 1035  |
| 1918 | 33      | 84         | 156       | 30          | 273       | 83                 | 442                      | 112        | 1213  |
| 1919 | 2       | 42         | 87        | 24          | 244       | 27                 | 345                      | 90         | 862   |
| 1920 | 16      | 57         | 143       | 19          | 91        | 66                 | 402                      | 100        | 994   |
| 1921 | 5       | 38         | 83        | 12          | 178       | 27                 | 403                      | 91         | 837   |
| 1922 | 14      | 44         | 128       | 11          | 153       | 22                 | 352                      | 88         | 822   |
| 1923 | 15      | 32         | 94        | 10          | 105       | 21                 | 376                      | 103        | 756   |
| 1924 | 4       | 38         | 106       | 17          | 115       | 24                 | 358                      | 86         | 746   |
| 1925 | 3       | 26         | 99        | 11          | 105       | 23                 | 376                      | 103        | 746   |
| 1926 | 17      | 18         | 142       | 5           | 102       | 16                 | 383                      | 70         | 753   |
| 1927 | 0       | 13         | 91        | 10          | 70        | 28                 | 357                      | 67         | 636   |
| 1928 | 11      | 8          | 97        | 12          | 60        | 19                 | 356                      | 55         | 626   |
| 1929 | 0       | 14         | 121       | 8           | 43        | 28                 | 307                      | 73         | 594   |
| 1930 | 4       | 9          | 95        | 10          | 33        | 10                 | 278                      | 73         | 512   |
| 1931 | 0       | 10         | 86        | 17          | 30        | 21                 | 273                      | 53         | 490   |
| 1932 | 0       | 2          | 67        | 5           | 13        | 12                 | 232                      | 40         | 371   |
| 1933 | 2       | 2          | 75        | 2           | 18        | 10                 | 191                      | 56         | 356   |
| 1934 | 0       | 2          | 52        | 5           | 23        | 2                  | 221                      | 37         | 342   |
| 1935 | 3       | 3          | 59        | 7           | 22        | 16                 | 264                      | 43         | 417   |
| 1936 | 0       | 5          | 51        | 10          | 13        | 9                  | 202                      | 42         | 332   |
| 1937 | 4       | 0          | 47        | 1           | 26        | 6                  | 167                      | 36         | 287   |
| 1938 | 0       | 3          | 40        | 3           | 10        | 10                 | 211                      | 39         | 310   |
| 1939 | 0       | 2          | 28        | 1           | 18        | 6                  | 201                      | 47         | 303   |
| 1940 | 0       | 1          | 26        | 4           | 14        | 0                  | 223                      | 32         | 300   |

## INFANT MORTALITY BY COLOR

| YEAR | INFANT MORTALITY RATE |       |       | POST-NEO-NATAL RATE * |       |       | NEO-NATAL RATE ** |       |       |
|------|-----------------------|-------|-------|-----------------------|-------|-------|-------------------|-------|-------|
|      | TOTAL                 | WHITE | COLOR | TOTAL                 | WHITE | COLOR | TOTAL             | WHITE | COLOR |
| 1916 | 89.6                  |       |       | 51.6                  |       |       | 34.0              |       |       |
| 1917 | 87.8                  |       |       | 48.9                  |       |       | 34.3              |       |       |
| 1918 | 104.7                 |       |       | 65.4                  |       |       | 39.3              |       |       |
| 1919 | 76.2                  |       |       | 43.1                  |       |       | 33.1              |       |       |
| 1920 | 81.7                  | 81.0  | 62.1  | 40.0                  | 36.6  | 35.0  | 30.7              | 37.1  | 66.4  |
| 1921 | 71.5                  | 67.9  | 134.5 | 35.1                  | 32.4  | 75.7  | 36.4              | 35.5  | 53.8  |
| 1922 | 74.8                  | 70.9  | 140.8 | 39.5                  | 37.2  | 77.0  | 35.3              | 33.7  | 63.8  |
| 1923 | 68.0                  | 65.0  | 112.4 | 32.0                  | 29.7  | 66.1  | 36.0              | 35.3  | 46.3  |
| 1924 | 65.2                  | 60.1  | 129.5 | 32.9                  | 29.2  | 79.1  | 32.3              | 30.9  | 50.4  |
| 1925 | 68.7                  | 61.0  | 155.1 | 38.4                  | 33.8  | 89.9  | 30.3              | 27.2  | 65.2  |
| 1926 | 71.9                  | 66.6  | 130.4 | 36.4                  | 33.2  | 73.8  | 35.5              | 33.4  | 56.6  |
| 1927 | 71.3                  | 51.7  | 101.5 | 36.4                  | 25.1  | 75.1  | 34.1              | 24.6  | 80.1  |
| 1928 | 63.9                  | 54.8  | 137.0 | 29.1                  | 25.4  | 58.3  | 34.8              | 29.4  | 78.7  |
| 1929 | 59.6                  | 49.8  | 138.7 | 28.4                  | 23.2  | 70.3  | 31.2              | 26.6  | 68.4  |
| 1930 | 52.1                  | 46.0  | 102.7 | 24.2                  | 21.2  | 50.0  | 27.9              | 24.8  | 52.7  |
| 1931 | 51.5                  | 46.3  | 95.5  | 21.5                  | 21.8  | 45.8  | 30.0              | 24.5  | 49.7  |
| 1932 | 42.2                  | 37.3  | 82.0  | 16.7                  | 14.2  | 36.9  | 25.5              | 23.1  | 45.1  |
| 1933 | 45.1                  | 39.1  | 91.1  | 20.3                  | 17.2  | 42.8  | 26.8              | 21.9  | 48.3  |
| 1934 | 45.2                  | 38.8  | 94.3  | 18.0                  | 14.5  | 44.3  | 27.2              | 24.3  | 50.0  |
| 1935 | 54.6                  | 50.7  | 84.8  | 21.7                  | 18.6  | 45.9  | 32.9              | 32.1  | 38.9  |
| 1936 | 45.2                  | 39.1  | 89.1  | 18.4                  | 14.8  | 45.3  | 27.5              | 24.2  | 44.2  |
| 1937 | 37.5                  | 24.0  | 61.5  | 15.7                  | 23.3  | 39.0  | 21.8              | 17.7  | 22.5  |
| 1938 | 39.1                  | 23.1  | 62.2  | 14.5                  | 17.6  | 32.1  | 24.6              | 5.5   | 30.1  |
| 1939 | 38.1                  | 36.7  | 74.8  | 3.8                   | 18.4  | 32.2  | 24.3              | 18.3  | 42.6  |
| 1940 | 35.1                  | 35.8  | 70.9  | 10.4                  | 12.6  | 23.0  | 24.7              | 23.2  | 47.9  |

\* OVER 1 MONTH BUT UNDER 1 YEAR.

\*\* UNDER 1 MONTH.

NOTE - DEATHS NOT SEPARATED BY COLOR PRIOR TO 1920.

# VENEREAL DISEASE CONTROL DIVISION

DR. MAX W. EXNER, DIRECTOR

## GENERAL REPORT

### 1. SYPHILIS PATIENTS DISMISSED.

A CRUCIAL TEST OF A CLINIC IS THE PROPORTION OF PATIENTS TREATED TO THE POINT OF PERMANENT ARREST OR CURE OF THE DISEASE. DURING 1940 THE CLINIC DISCHARGED 1125 PATIENTS AS "PERMANENTLY ARRESTED OR CURED." WITH THE EXCEPTION OF SOME OF THE "EARLY" CASES, THESE PATIENTS HAD RECEIVED A MINIMUM OF TWO YEARS OF TREATMENT PLUS TWO YEARS OF OBSERVATION. IN ADDITION, 4,200 MORE PATIENTS WERE PLACED ON OBSERVATION AND REST FROM TREATMENT AS PRESUMABLY HAVING COMPLETED THE REQUIRED TREATMENT.

THIS IS A VERY EXCEPTIONAL RECORD FOR ANY CLINIC. IT HAS BEEN MADE POSSIBLE BY THE EXTENT, QUALITY AND THOROUGHNESS OF THE SOCIAL SERVICE SYSTEM OF THE VENEREAL DIVISION WHICH EMBRACES THE CARE AND REPEATED MEDICAL CHECKS OF PATIENTS, THE PERSONAL FOLLOW-UP OF PATIENTS AND Lapses FROM TREATMENT, AND SPERMATOZOIC SEARCH FOR EVIDENCES OF INFECTION. A FRIENDLY, COURTEOUS ATTITUDE TOWARD PATIENTS IS A HELPFUL FACTOR.

THROUGHOUT THE YEAR AN AVERAGE OF ABOUT 20 FULL-TIME WORKERS WERE EMPLOYED IN THE SOCIAL SERVICE, ABOUT TWO-THIRDS OF WHOM WERE EMPLOYED ON THE VENEREAL PROJECT OF THE N. P. A. HIGH PRAISE MUST BE ACCORDED THIS N. P. A. GROUP FOR THE HARD, SPLENDID AND CAREFULLY SUPERVISED WORK THEY HAVE DONE. THE RESULTS MENTIONED ABOVE COULD NOT HAVE BEEN OBTAINED WITHOUT THIS PROJECT. THE SOCIAL SERVICE STAFF MADE 37,402 HOME VISITS TO PATIENTS AND SENT 17,468 LETTERS.

### 2. THE SEROLOGIC "DRAGNET".

THE KLINE LABORATORY MADE 59,985 BLOOD TESTS DURING THE YEAR, AND THE CITY LABORATORY MADE 69,381 KAHN-ROSEMAN AND KAHN TESTS, MAKING A TOTAL OF 129,296 BLOOD TESTS. THIS REPRESENTS A VELOCIOUS USE OF WHAT DR. P. R. KAHN, CHIEF OF THE INDIANIA LABORATORY, HAS CALLED THE "DRAGNET OF THE SEROLOGIC TEST," THE USE OF WHICH IS SO VITAL IN THE DRIVE FOR THE CONQUEST OF SYPHILIS.

THE FOLLOWING MEANS ARE EMPLOYED IN THE SEARCH FOR SYPHILITIC INFECTION:

- (1) BLOOD TESTS ARE MADE ON ALL PATIENTS IN THE CITY DISPENSARY INCLUDING ABOUT 25 DIFFERENT CLINICS. FIVE TO SIX PERCENT ARE FOUND POSITIVE.
- (2) BLOOD TESTS ARE INCLUDED IN THE REQUIRED EXAMINATIONS OF DOMESTICS EVERY SIX MONTHS.
- (3) BLOOD TESTS ARE INCLUDED ONCE A YEAR ON ALL FOOD HANDLERS IN THE EXAMINATIONS REQUIRED TWICE A YEAR.
- (4) THE NEWARK CITY HOSPITAL ROUTINELY TAKES BLOOD TESTS ON 75 TO 80 PERCENT OF ITS PATIENTS.
- (5) THE VENEREAL DIVISION MAKES BLOOD TESTS FREE OF CHARGE ON EMPLOYEES OF INDUSTRIAL AND COMMERCIAL CONCERNS, TAKING THE BLOOD SAMPLES AT THE PLANTS.

### 3. EDUCATION.

A PROGRAM FOR DOCTORS WAS CONDUCTED INCLUDING DISPLAY FOR ONE WEEK OF A SERIES OF EXHIBITS ON SYPHILIS, AND LECTURES FOR FOUR DAYS BY AUTHORITIES IN THE VENEREAL FIELD.

THE EDUCATIONAL PROGRAM AMONG NEGROES WAS CONTINUED UNDER THE ABLE LEADERSHIP OF DR. E. MAE MCCARROLL. FORTY-NINE TALKS WERE GIVEN TO A WIDE VARIETY OF COMMUNITY GROUPS WITH ATTENDANCE OF 5,249 TOGETHER WITH THE ESTABLISHMENT OF SELECTED PRISON

MATTER. THIRTEEN MOTION-PICTURE SHOWINGS WERE MADE TO INDUSTRIAL GROUPS, LABOR UNIONS AND OTHERS.

THE DEPARTMENT OF HEALTH APPRECIATES THE CORDIAL COOPERATION OF DR. ELLIS L. SMITH AND STAFF OF THE ESSEX COUNTY ISOLATION HOSPITAL IN CONDUCTING THE FIVE-DAY MASSIVE ORIP TREATMENT FOR EARLY SYPHILIS. ABOUT 25 SUCH CASES HAVE BEEN TREATED. ALL PRIMARY AND SECONDARY CASES ARE NOW GIVEN OPPORTUNITY TO TAKE THIS SHORT-TERM CURE.

#### 4. SIGNS OF PROGRESS TOWARD SYPHILIS CONTROL.

THE FOUR TABLES PRESENTED UNDER THIS HEADING ARE INTERESTING AND SIGNIFICANT. TABLE I SHOWS A DROP IN CONGENITAL CASES REPORTED, FROM NEARLY 12 PERCENT IN THE FIVE YEARS, 1932 TO 1936, TO 4 PERCENT IN THE FOUR YEARS, 1937 TO 1940.

TABLE II SHOWS A DROP IN THE ANNUAL ATTACK RATE OF SYPHILIS AMONG DOMESTICS FROM 9.3 PERCENT IN 1936 TO 6.1 PERCENT IN 1940. AMONG THE NEGROES ALONE THE DROP IS MORE STRIKING, FROM 14.6 PERCENT IN 1936 TO 9.5 PERCENT IN 1939.

TABLE I SHOWS A DROP OF 3 PERCENT IN NEW INFECTION FROM THE FIVE YEARS, 1931 TO 1935, TO THE FIVE YEARS, 1936 TO 1940. THIS DECREASE IS PARTICULARLY SIGNIFICANT, THE DROP IN PERCENTAGES SHOWN IN THE OTHER THREE TABLES MAY BE DUE TO A COUNTER-INDICATING RATIO OF THE LACK OF CLINICAL NEW INFECTIONS. THIS COULD NOT HOLD FOR NEW INFECTIONS.

TABLE IV SHOWS A DECREASE IN THE NUMBER OF SYPHILIS CASES REPORTED. THERE WERE 3522 CASES IN 1938; 3290 CASES IN 1939, AND A VERY SHARP DROP TO 2338 IN 1940, IN SPITE OF THE FACT THAT FAITHFULNESS IN REPORTING HAS BEEN INCREASING FROM YEAR TO YEAR. IT WOULD SEEM THAT THE AGGRESSIVE DRIVE FOR THE CONQUEST OF SYPHILIS IS REALLY MAKING PROGRESS.

GREAT APPRECIATION ON THE PART OF NEWARK IS DUE THE STATE DEPARTMENT OF HEALTH FOR THE LARGAL APPROPRIATION OF FEDERAL FUNDS TO THE NEWARK DEPARTMENT OF HEALTH FOR VENEREAL DISEASE CONTROL, AND FOR ITS CORDIAL SPIRIT OF COOPERATION IN THE CONTROL PROGRAM. DURING THE PAST YEAR IT HAS MADE A PARTICULARLY VALUABLE CONTRIBUTION TOWARD ENLARGING AND IMPROVING OUR LABORATORY FACILITIES. ITS APPROPRIATION IN PERSONNEL, EQUIPMENT AND DRUGS HAS TOTALLED MORE THAN \$12,000.

#### SIGNS OF PROGRESS IN SYPHILIS CONTROL IN NEWARK

| - SYPHILIS REPORTED | YEARS        |              | TOTAL CASES | CONGENITAL | PERCENT CONGENITAL |
|---------------------|--------------|--------------|-------------|------------|--------------------|
|                     | 1932 TO 1936 | 1937 TO 1940 |             |            |                    |
|                     | 7150         | 5379         | 87%         | 217        | 4.03               |

#### II - INCIDENCE OF SYPHILIS AMONG DOMESTICS

|                   | 1936         | 1937         | 1938         | 1939         | 1940         |
|-------------------|--------------|--------------|--------------|--------------|--------------|
| TOTAL BLOOD TESTS | 8274         | 8562         | 7699         | 7751         | 7546         |
| POSITIVE          | 767 - (9.3%) | 835 - (9.8%) | 620 - (8.2%) | 516 - (6.7%) | 459 - (6.1%) |
| COLORED ALONE     | 14.6         | 11.5         | 12.0         | 9.5          |              |

#### III - EARLY SYPHILIS - PRIMARY AND SECONDARY

| - CASES                | TOTAL NEW PATIENTS | PRIMARY OR SECONDARY | PERCENT PRIMARY OR SECONDARY |
|------------------------|--------------------|----------------------|------------------------------|
|                        |                    |                      |                              |
| 1931 TO 1935 INCLUSIVE | 8142               | 904                  | 11.1                         |
| 1936 TO 1940 "         | 6677               | 559                  | 8.2                          |

#### IV - SYPHILIS CASES REPORTED IN NEWARK

|                | 1938 | 1939 | 1940 |
|----------------|------|------|------|
| TOTAL REPORTED | 3522 | 3290 | 2338 |

## EXA NAT ON, TREATMENTS AND REPORTS

|                             |   | 1937       | 1938        | 1939   | 1940   |
|-----------------------------|---|------------|-------------|--------|--------|
| PATIENTS<br>UNDER TREATMENT | SYPHILIS-NEW, MALE - - - - -            | -          | -           | -      | 527    |
|                             | " " FEMALE - - - - -                    | -          | -           | -      | 449    |
|                             | TOTAL - NEW - - - - -                   | -          | -           | -      | 976    |
|                             | TOTAL - MALE - - - - -                  | 3383       | 3105        | 3086   | 2831   |
|                             | TOTAL - FEMALE - - - - -                | 3487       | 3368        | 4406   | 4047   |
|                             | TOTAL - SYPHILIS - - - - -              | 6850       | 6473        | 7492   | 7854   |
|                             | GONORRHEA-NEW, MALE - - - - -           | -          | -           | -      | 999    |
|                             | " " FEMALE - - - - -                    | -          | -           | -      | 254    |
|                             | TOTAL - NEW - - - - -                   | -          | -           | -      | 1253   |
|                             | TOTAL - MALE - - - - -                  | 772        | 1599        | 1740   | 1112   |
| TREATMENTS GIVEN            | TOTAL - FEMALE - - - - -                | 369        | 624         | 966    | 985    |
|                             | TOTAL - GONORRHEA - - - - -             | 1141       | 2223        | 2706   | 2097   |
|                             | SYPHILIS - - - - -                      | 104011     | 113395      | 118866 | 85 8   |
|                             | GONORRHEA - - - - -                     | 20519      | 21317       | 22389  | 15201  |
| LABORATORY                  | KLINE TESTS - - - - -                   | -          | -           | -      | 59985  |
|                             | N. C. HOSPITAL LABS. - - - - -          | -          | -           | -      | 7758   |
|                             | KAHN - - - - -                          | -          | -           | -      | 61380  |
|                             | TOTAL-NEWARK CITY HOSPITAL - - - - -    | -          | -           | -      | 69138  |
|                             | TOTAL BLOOD TESTS - - - - -             | -          | -           | -      | 129123 |
|                             | G. C. SMEARS - - - - -                  | 12651      | 1643        | 19008  | 15790  |
|                             | DARKFIELDS - - - - -                    | 117        | 140         | 132    | 77     |
|                             | SPINAL FLUID EXAM. - - - - -            | 290        | 372         | 518    | 707    |
|                             | SYPHILIS PATIENTS PUT ON REST - - - - - | -          | -           | 3776   | 4200   |
|                             | " " DISEASE ARRESTED OR CURED - - - - - | -          | -           | 703    | 1 25   |
| SOCIAL SERVICE LETTERS SENT | " " VISITS MADE - - - - -               | 19907      | 26598       | 29845  | 37400  |
|                             | SYPHILIS REPORTED - - - - -             | -          | 3522        | 3290   | 2338   |
| SYPHILIS CONTACTS EXAMINED  | NEW CASES - - - - -                     | 976        |             |        |        |
|                             | FAMILY CONTACTS - - - - -               | 80         |             |        |        |
|                             | " " EXAMINED - - - - -                  | 1286       |             |        |        |
|                             | SOURCES OF INFECTION NAMED - - - - -    | 62         |             |        |        |
|                             | " " EXAM. - - - - -                     | 31         |             |        |        |
|                             | FAMILY CONTACTS NAMED INCLUDE           |            |             |        |        |
|                             | CONTACTS OTHER THAN MARITAL             |            |             |        |        |
|                             | PARTNERS AND THEIR CHILDREN.            |            |             |        |        |
|                             | EXC. - - - - -                          |            |             |        |        |
|                             | MARITAL PARTNERS AND CHILDREN           |            |             |        |        |
| BLOOD TESTS                 | ARE EXAMINED.                           |            |             |        |        |
|                             | FOOD HANDLERS - - - - -                 | 1939       | 1940        |        |        |
|                             | POSITIVE - - - - -                      | 20151      | 18851       |        |        |
|                             | NEGATIVE - - - - -                      | 462 (2.3%) | 348 (2.04%) |        |        |
|                             | DISPENSARY - - - - -                    | 19689      | 18503       |        |        |
|                             | POSITIVE - - - - -                      | 10533      | 7961        |        |        |
|                             | NEGATIVE - - - - -                      | 596 (5.6%) | 441 (5.5%)  |        |        |
|                             | DOMESTICS - - - - -                     | 2937       | 7512        |        |        |
|                             | POSITIVE - - - - -                      | 7751       | 7546        |        |        |
|                             | NEGATIVE - - - - -                      | 516 (6.7%) | 459 (6.1%)  |        |        |
| METRIC CLINIC               | POSITIVE - - - - -                      | 7238       | 7087        |        |        |
|                             | NEGATIVE - - - - -                      | 13326      | 11185       |        |        |
|                             | POSITIVE - - - - -                      | 7647       | 7459        |        |        |
|                             | NEGATIVE - - - - -                      | 5679       | 3726        |        |        |
|                             | OTHER SOURCES - - - - -                 | 3011       | 14442       |        |        |
|                             | TOTAL KLINE TESTS - - - - -             | 56325      | 59985       |        |        |
|                             | N. C. HOSPITAL LABORATORY               |            |             |        |        |
|                             | VASSERMAN POSITIVE - - - - -            |            |             |        | 2200   |
|                             | " " NEGATIVE - - - - -                  |            |             |        | 5558   |
|                             | KAHN POSITIVE - - - - -                 |            |             |        | 7293   |
| TOTAL BLOOD TESTS           | " " NEGATIVE - - - - -                  |            |             |        | 54087  |
|                             | TOTAL N. C. HOSPITAL TESTS - - - - -    |            |             |        | 69138  |
|                             | TOTAL BLOOD TESTS - - - - -             |            |             |        | 129123 |



# OCCUPATIONAL CLINIC

DR. WILLIAM T. RUMAGE, DIRECTOR

SINCE THE FOODHANDLER AND DOMESTIC SEMI-ANNUAL EXAMINATION WORK WAS STARTED IN 1920, THERE HAS BEEN A STEADY INCREASE IN THESE CLINICS. IN VIEW OF THIS, A SMALL TWO STORY ANNEX WAS RENTED IN 1936 WHICH PROVIDES EXCELLENT FACILITIES FOR THIS TYPE OF WORK. THERE IS ONE FLOOR FOR EACH SEX AND FEMALE PHYSICIANS ARE PROVIDED FOR DOMESTICS DUE TO THE TYPE OF EXAMINATION WHICH INCLUDES ROUTINE CERVICAL SMEARS.

## SYPHILIS

BLOOD TESTS ARE MADE SEMI-ANNUALLY FOR ALL DOMESTICS BUT ONLY ANNUALLY FOR FOODHANDLERS. THIS IS DUE TO THE FACT THAT AMONG THE FOODHANDLERS, POSITIVES AVERAGE ONLY 2%, WHEREAS A MOST 10% OF OUR DOMESTICS ARE UNDER TREATMENT FOR SYPHILIS. FORTUNATELY FEW OF THE CASES DISCOVERED ARE INFECTIONS, ALTHOUGH MOST UNFORTUNATELY OF THEM HAVE NO KNOWLEDGE OF THEIR CONDITION UNTIL OUR EXAMINATION. THEY ARE ALL, OF COURSE, REQUIRED TO UNDERGO TREATMENT EITHER BY THEIR OWN PHYSICIAN OR AT OUR CLINIC.

|                         |        | CLINIC TESTS | POSITIVES | TESTS FOR PRIV. PHYSIC.       |
|-------------------------|--------|--------------|-----------|-------------------------------|
| FOODHANDLERS            | MALE   | - - - - -    | 2,085     | 230                           |
|                         | FEMALE | - - - - -    | 6,360     | 98                            |
|                         | TOTAL  | - - - - -    | 19,045    | 348                           |
| DOMESTICS               | TOTAL  | - - - - -    | 7,644     | 473                           |
| KNOWN CASES OF SYPHILIS |        |              |           | 1,279 (TOTAL 1,752 POSITIVES) |

## TUBERCULOSIS

ANOTHER IMPORTANT PART OF THESE EXAMINATIONS IS THE SEMI-ANNUAL EXAMINATION ON BOTH DOMESTICS AND FOODHANDLERS FOR TUBERCULOSIS. EVEN THOUGH VERY LITTLE TUBERCULOSIS HAS BEEN FOUND AMONG EITHER TYPE OF EMPLOYEE, FLUOROSCOPE EQUIPMENT AND A SPECTROSCOPIC AND A CLINICAL EXAMINATION (95% OF ALL DOMESTIC AND FEMALE) AND CHEST X-RAYS OFFER THE ONLY RELIABLE OR MINIMAL CASES WHICH MIGHT BE OVERLOOKED BY STETHOSCOPE EXAMINATION. FOR GREATER ACCURACY ANOTHER FLUOROSCOPE EQUIPMENT WILL BE INSTALLED IN THE MALE SECTION THIS YEAR.

DURING THE YEAR 490 FOODHANDLERS WERE REFERRED TO THE TUBERCULOSIS DIVISION FOR RE-EXAMINATION AND 5,893 FLUOROSCOPE EXAMINATIONS WERE MADE IN THE DOMESTIC DIV. THE TUBERCULOSIS DIVISION REPORTS 3 FOODHANDLERS AND 1 DOMESTIC. ALL DOMESTICS WERE GIVEN FREQUENT HEALTH CHECKS WHICH MUST BE RE-EXAMINED EVERY THREE MONTHS AND ARE SUBJECT TO A RE-CALL AT ANY TIME DEEMED NECESSARY BY THE TUBERCULOSIS DIVISION.

## CONORRHEA

ALL MALE FOODHANDLERS AND MALE DOMESTICS ARE TAKEN ON ALL SUSPECTIVE CASES. DURING 1940 FIFTEEN MALE FOODHANDLERS WERE INFECTED. 24 DOMESTICS WERE INFECTED. 95 OUT OF 1,720 SMEARS WERE FOUND TO BE POSITIVE.

## VINCENTS ANGINA

ALL FOODHANDLERS AND DOMESTICS ARE ALSO CHECKED FOR VINCENTS ANGINA (33 POSITIVES OUT OF A TOTAL OF 226 AMONG DOMESTICS), BAD TEETH, SKIN CONDITION, MOUTH, NOSE AND EAR SUPPERATIONS, DISEASE CARRIERS AND VACCINATIONS. ALL EMPLOYEES WHO HAVE NEVER BEEN VACCINATED ARE VACCINATED AT THIS CLINIC. THROUGH THE YEAR 139 DOMESTICS AND 7 FOODHANDLERS HAVE BEEN VACCINATED.

## RECAPITULATION

|             |                     | TOTAL | WHITE | BLACK | YELLOW      | MALE  | FEMALE |
|-------------|---------------------|-------|-------|-------|-------------|-------|--------|
| FOODHANDLER | CLINIC EXAMINATIONS | 1000  | 279   | 9     | 13          | 2010  | 9871   |
|             | PRIV. DOCTOR "      | 7930  | 7734  | 179   | 17          | 6134  | 1796   |
|             | CLINIC RE-EXAM.     | 420   | 444   | 45    | 1           | 342   | 148    |
| TOTAL       |                     | 38421 | 36090 | 2175  | 156         | 26606 | 18115  |
| DOMESTIC    | CLINIC EXAMINATIONS | 9190  | 2361  | 209   | 10          | 15    | 15     |
|             | PRIV. DOCTOR "      | 799   | 700   | 1099  | ALL FEMALE. |       |        |
|             | TOTAL               | 10279 | 3061  | 7898  |             |       |        |

NOTE: IN ADDITION TO FOODHANDLERS AND DOMESTICS, SPECIAL EXAMINATIONS AT THIS CLINIC INCLUDED GROUPS OF N.Y.A. WORKERS, TAXI DRIVERS AND BARBERS. DURING THE YEAR A "SOUND MOVIE" ON SANITARY FOOD HANDLING WAS SHOWN TO MANY GROUPS.

# BACTERIOLOGICAL LABORATORY

DR. H. A. TARBELL, CHIEF BACTERIOLOGIST

A RECAPITULATION OF THE ROUTINE WORK PERFORMED AT THE BACTERIOLOGICAL LABORATORY DURING THE YEAR 1940 IS GIVEN IN THE FOLLOWING TABLE TOGETHER WITH SIMILAR DATA FOR THE PRECEDING YEARS.

IT MAY BE SEEN BY THE TABLE THAT THE ACTIVITIES OF THE LABORATORY COVER A WIDE RANGE OF SUBJECTS AND THE EIGHT YEARS TOTALS SHOW THAT SOME, LIKE DIPHTHERIA, ARE DECREASING IN NUMBER WHILE IN OTHERS AS GONORRHOEA, THE TESTS ARE INCREASING.

DURING 1939, WE DISCONTINUED THE PRODUCTION OF TYPHOID AND PERTUSSIS VACCINES. 1032 DOSES OF TUBERCULIN (FOR TREATMENT) WERE PRODUCED AND DISTRIBUTED IN 1940.

## EXAMINATIONS AND RESULTS

|  | 1933  | 1934  | 1935  | 1936  | 1937  | 1938  | 1939  | 1940  |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
| DIPHTHERIA CULTURES - - - -                      | 10168 | 8892  | 8404  | 7806  | 6733  | 6901  | 7335  | 6841  |
| " " Pos. - -                                     | 16    | 15    | 17    | 9     | 4     | 7     | 4     | 0     |
| TUBERCULOSIS SPUTA - - - -                       | 2073  | 2134  | 2234  | 2135  | 2034  | 2335  | 2394  | 2354  |
| " " Pos. - -                                     | 303   | 294   | 339   | 304   | 267   | 288   | 236   | 244   |
| TYPHOID (WIDALS) - - - -                         | 1841  | 1198  | 1092  | 781   | 740   | 580   | 515   | 330   |
| " " Pos. - - -                                   | 22    | 42    | 238   | 143   | 70    | 75    | 79    | 33    |
| DOG BRAIN (RABIES) - - - -                       | 176   | 108   | 32    | 34    | 16    | 168   | 165   | 74    |
| PQS. OUT-OF-TOWN - - - -                         | 25    | 12    | 0     | 0     | 0     | 21    | 29    | 21    |
| " NEWARK DOGS - - - -                            | 30    | 28    | 0     | 0     | 0     | 86    | 64    | 14    |
| VINCENY'S ANGINA SMEARS - -                      | 565   | 1644  | 1629  | 1188  | 1349  | 2262  | 1813  | 1663  |
| " " " Pos. - -                                   | 142   | 404   | 334   | 357   | 467   | 641   | 454   | 406   |
| GONORRHOEA SMEARS - - - -                        | 7506  | 15463 | 14145 | 15200 | 17155 | 20591 | 19886 | 19409 |
| " " " Pos. - -                                   | 1520  | 1526  | 1471  | 1436  | 1710  | 1580  | 1465  | 1283  |
| WATER EXAMINATIONS - - - -                       | 625   | 729   | 702   | 746   | 882   | 829   | 694   | 614   |
| MILK " - - - -                                   | 3522  | 3407  | 3418  | 3189  | 3250  | 2917  | 2603  | 7431  |
| ICE CREAM ETC. " - - - -                         | 522   | 461   | 465   | 294   | 217   | 255   | 253   | 216   |
| SHELL FISH " - - - -                             | 159   | 144   | 105   | 67    | 77    | 81    | 36    | 63    |
| SWABBINGS FROM BEVERAGE<br>GLASSES, ETC. - - - - | -     | -     | -     | -     | 264   | 340   | 372   | 418   |
| DOG BITE INVESTIGATIONS - -                      | 1902  | 1980  | 1900  | 2256  | 2296  | 2936  | 2980  | 2592  |
| PASTEUR TREATMENTS GIVEN -                       | 32    | 10    | 0     | 2     | 0     | 64    | 38    | 9     |

## MISCELLANEOUS EXAMINATIONS

|     |                                 |
|-----|---------------------------------|
| 53  | EXAMINATIONS FOR FOOD POISONING |
| 47  | " " UNOULANT FEVER              |
| 2   | STOOL & URINE " TYPHOID FEVER   |
| 508 | PNEUMONIA TYPINGS               |
| 66  | MISCELLANEOUS EXAMINATIONS      |



# SEROLOGICAL LABORATORY

DR. H. S. MARTLAND, PATHOLOGIST

THE WORK OF THE SEROLOGICAL LABORATORY DURING THE YEAR HAS BEEN VERY HEAVY, THE TOTAL NUMBER OF EXAMINATIONS BEING 75,104, EXCEEDING ALL PREVIOUS YEARS.

THIS LABORATORY WAS ESTABLISHED IN 1911 AND WAS THE FIRST LABORATORY TO PERFORM SEROLOGICAL EXAMINATIONS FOR SYPHILIS IN THIS STATE.

SINCE ITS INCEPTION THE WORK HAS INCREASED EACH SUCCEEDING YEAR SO RAPIDLY THAT IT HAS BECOME THE LARGEST UNIT PERFORMING WASSERMANN TESTS IN THIS PART OF THE STATE.

THE TESTS USED IN THIS LABORATORY FOR THE DETECTION OF SYPHILIS ARE THE WASSERMANN REACTION, USING THE KOLMER STANDARDIZED TECHNIQUE, AND THE PRECIPITATION TEST OF KAHN. KAHN TESTS ARE PERFORMED ON ALL BLOOD SPECIMENS SUBMITTED. IF NEGATIVE, THEY ARE SO REPORTED AND NO OTHER TESTS ARE PERFORMED. IF THE KAHN TESTS ARE POSITIVE OR SUSPICIOUS, WASSERMANN TESTS USING THE KOLMER TECHNIQUE, ARE PERFORMED. ALL SPINAL FLUIDS ARE TESTED BY THE WASSERMANN PROCEDURE.

IN REGARD TO PRIVATE LABORATORIES PERFORMING VARIOUS TESTS FOR SYPHILIS IN HEALTH WORK, I AM OF THE OPINION THAT ALTHOUGH EVERYONE WOULD LIKE TO HELP PRIVATE LABORATORIES WHICH ARE APPROVED BY THE STATE, IT SHOULD NOT BE LOST SIGHT OF THAT THE SEROLOGICAL DIAGNOSIS OF SYPHILIS IS A PUBLIC HEALTH PROBLEM. THE SMALL NUMBER OF PEOPLE ABLE TO PAY PRIVATE LABORATORY FEES IS A NEGLIGIBLE FACTOR. FOR THESE REASONS AND MANY OTHERS, THE STATE AND LARGER MUNICIPALITIES MUST TAKE CARE OF THIS IMPORTANT PUBLIC HEALTH WORK.

THE SMALL NUMBER OF DARKFIELD EXAMINATIONS MADE FOR THE DIAGNOSIS OF THE PRIMARY LESION IS READILY EXPLAINED BY THE FACT THAT MOST OF THESE CASES ARE SEEN IN THE SYPHILIS CLINIC OF THE CITY DISPENSARY, WHERE THESE TESTS ARE REGULARLY BEING MADE.

## NUMERICAL SUMMARY OF WORK PERFORMED

|   | 1926   | 1927   | 1928   | 1929   | 1930   |
|---|--------|--------|--------|--------|--------|
| BLOOD WASSERMANN - KOLMER TECHNIC) - - -  | 11,180 | 12,608 | 10,941 | 7,206  | 6,104  |
| " " " " POS. - - - - -  | 3,966  | 4,552  | 3,269  | 2,467  | 2,091  |
| SPINAL FLUID WASSERMANN - - - - -   | 787    | 982    | 1,014  | 1,165  | 1,454  |
| " " " " POS. - - - - -  | 54     | 74     | 95     | 108    | 109    |
| KAHN PRECIPITATION TESTS - - - - -  | 40,123 | 45,457 | 57,560 | 61,115 | 61,380 |
| " " " " POS. - - - - -  | 5,707  | 6,514  | 8,951  | 9,577  | 7,293  |
| DARKFIELD EXAMINATIONS - - - - -  | 73     | 38     | 15     | 5      | 20     |
| " " " " POS. - - - - -  | 8      | 6      | 5      | 3      | 15     |
| SMCARS FOR GONOCOCCI (FROM CITY HOSP. ONLY)   | 3,535  | 3,293  | 4,115  | 4,141  | 5,263  |
| " " " " POS. - - - - -  | 997    | 180    | 112    | 192    | 755    |
| ROUTINE SEROLOGICAL EXAMS. (SPINAL FLUID).<br>(INCLUDING CELL COUNT, GLOBULIN, GOLD<br>SOL AND BACTERIOLOGICAL EXAMINATION) | 1,146  | 471    | 675    | 817    | 856    |
| TOTAL EXAMINATIONS - - - - -  | 56,844 | 62,849 | 74,320 | 74,449 | 75,104 |

## SOURCE OF BLOOD SPECIMENS FOR SEROLOGICAL DIAGNOSIS OF SYPHILIS

|   |        |
|---|--------|
| NEWARK CITY HOSPITAL (CHIEFLY AS EXCLUSION TEST) PLUS BLOOD DONORS - - - - -  | 9,136  |
| NEWARK CITY DISPENSARY (ROUTINE FOR ALL PATIENTS) AND TO CONFIRM POS. KLINE<br>TESTS OF FOOD HANDLERS AND DOMESTICS - - - - - | 14,236 |
| OTHER HOSPITALS IN NEWARK - - - - -   | 5,774  |
| PHYSICIANS OF NEWARK (FROM PRIVATE AND CHARITY HOME PATIENTS) - - - - -   | 32,015 |
| PRENATAL TESTS (REQUIRED BY LAW) 1764 OF THESE FROM CITY PRE-NATAL CLINIC - - - - -   | 4,289  |
| PREMARITAL TESTS (REQUIRED BY LAW OF 1930) - - - - -  | 12,147 |

OF 9,280 PREMARITAL TESTS IN WHITE PERSONS, 60 WERE POSITIVE; OF 1,156  
NEGROES, 116 POSITIVE. OF 3,419 PRENATAL TESTS IN WHITES, 27 WERE  
POSITIVE; IN 870 NEGROES, 41 POSITIVE.



# CHEMICAL LABORATORY

HALSEY DURAND, CITY CHEMIST

THE TOTAL NUMBER OF ANALYSES FOR 1940 SHOWS AN INCREASE OF 3,788 AS COMPARED WITH 1939. THE INCREASE WAS MAINLY PHOSPHOMONESTERASE TESTS DUE TO THE FACT THAT HERETOFORE THESE TESTS WERE RUN ONLY ON HIGH BACTERIA COUNT MILKS, BUT NOW ON ALL ROUTINE MILKS.

IN MONTHLY SAMPLES OF WATER FROM DIFFERENT LOCALITIES OF THE PEQUANNOCK AND MANAQUE SUPPLY SYSTEMS, IRREGULARITIES WERE FOUND AT POINTS IN THE TWO SYSTEMS AND INVESTIGATIONS AS TO CAUSE WERE RECOMMENDED. THESE IRREGULARITIES WERE EXPLAINED BY ADDITIONS MADE TO THE WATER FOR PURIFICATION PURPOSES. ANALYSES OF LOCAL FAUCET SAMPLES SHOWED THEM TO BE OF ABOUT THE USUAL HIGH STANDARD OF PURITY. IN ADDITION TO MILKS, CREAMS AND ICE CREAMS, FOODS OF PRACTICALLY EVERY DESCRIPTION WERE ANALYZED FOR ADULTERATION, INJURIOUS INGREDIENTS (CAUSING ILLNESS) PRESERVATIVES, ARTIFICIAL COLOR, POISONOUS METALS, FOREIGN SUBSTANCES, ARTIFICIAL FLAVORS, CONFORMITY TO STANDARD, FITNESS FOR HUMAN CONSUMPTION AND COMPOSITION. INCLUDED WERE GRAPE SODAS, BUTTER, OLIVE OIL, CHOPPED MEAT AND CANDY, WITCH HAZEL EXTRACT, CITRATE MAGNESIA, FACE CREAM, BLOOD FOR PERCENT PROTEIN AND URINE FOR ARSENIC. SAMPLES OF CITY WATER FROM LOCAL FAUCETS WERE FOUND TO BE OF THE USUAL HIGH STANDARD OF PURITY. SAMPLES FROM SPRINGS, DRIVEN AND DUG WELLS AND THE PASSAIC RIVER WERE ALSO ANALYZED. SWIMMING AND WADING POOLS WERE ANALYZED FOR AVAILABLE CHLORINE, INCLUDING THE POOL AT THE CITY HOME. PHOSPHOMONESTERASE TESTS FOR IMPROPER PASTEURIZATION WERE RUN ON ALL ROUTINE MILKS.

## SUMMARY OF EXAMINATIONS BY YEAR

| YEAR | TOTAL | MILK | CREAM | ICE CREAM | WATER | MISCL. | PHOSPHOTASE TEST |
|------|-------|------|-------|-----------|-------|--------|------------------|
| 1931 | 8877  | 6756 | 1379  | 190       | 369   | 183    | -                |
| 1932 | 9312  | 7290 | 1384  | 112       | 447   | 80     | -                |
| 1933 | 8931  | 7003 | 865   | 232       | 503   | 248    | -                |
| 1934 | 6994  | 4804 | 203   | 448       | 493   | 1046   | -                |
| 1935 | 6040  | 4636 | 147   | 387       | 629   | 241    | -                |
| 1936 | 5624  | 4488 | 132   | 244       | 537   | 223    | -                |
| 1937 | 6023  | 4882 | 184   | 248       | 557   | 152    | -                |
| 1938 | 4986  | 4004 | 119   | 197       | 497   | 169    | -                |
| 1939 | 4118  | 2977 | 94    | 222       | 493   | 171    | 161              |
| 1940 | 7906  | 3365 | 93    | 211       | 444   | 161    | 3632             |

## MILK SAMPLES

|                                   | 1932  | 1934  | 1935  | 1936  | 1937  | 1938  | 1939  | 1940  |
|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| TOTAL MILKS (ROUTINE) - - - - -   | 7003  | 4798  | 4636  | 4488  | 4882  | 4004  | 2977  | 3365  |
| " " SEALED - BELOW STD. - -       | 36    | 8     | 0     | 1     | 5     | 0     | 1     | 2     |
| " " UNSEALED " " - - -            | 151   | 54    | 8     | 0     | 0     | 1     | 0     | 0     |
| AVE. SOLIDS ABOVE STANDARD (MILK) | 12.34 | 12.48 | 12.39 | 12.56 | 12.69 | 12.55 | 12.66 | 12.73 |
| " " BELOW " " - - -               | 11.15 | 11.32 | 0     | 11.38 | 11.13 | 9.85  | 10.91 | 10.43 |
| " " ALL SAMPLES " " - - -         | 12.33 | 12.48 | 12.39 | 12.55 | 12.68 | 12.94 | 12.66 | 12.72 |
| AVE. FAT - ABOVE STANDARD (MILK)  | 3.59  | 3.70  | 3.99  | 3.66  | 3.66  | 3.76  | 3.66  | 3.74  |
| " " - BELOW " " - - -             | 3.21* | 3.37* | 3.13* | 2.90  | 2.30  | 1.50  | 2.14  | 1.58  |
| " " - ALL SAMPLES " " - - -       | 3.59  | 3.69  | 3.99  | 3.66  | 3.66  | 3.75  | 3.66  | 3.74  |

\* THE FAT IN % BELOW STANDARD IS HIGHER BY REASON OF THE FACT THAT LOW CERTIFIED MILKS, THE STANDARD FOR SOME OF WHICH IS 4.00% AND FOR OTHERS 3.50%, AND ALSO THE LOW GRADE A MILKS, THE NEW JERSEY STATE MILK CONTROL STANDARD FOR WHICH IS 3.50%, ARE INCLUDED IN THE BELOW STANDARD AVERAGE, ALTHO ABOVE THE ORDINARY STANDARD OF 3.00%.

## CREAM AND ICE CREAM SAMPLES

|                             | 1932 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 |
|-----------------------------|------|------|------|------|------|------|------|------|
| CREAM SAMPLES - - - - -     | 865  | 203  | 147  | 132  | 184  | 119  | 94   | 93   |
| " " BELOW STANDARD - - -    | 4    | 0    | 0    | 2    | 0    | 0    | 0    | 0    |
| ICE CREAM SAMPLES - - - - - | 232  | 374  | 387  | 244  | 248  | 197  | 222  | 211  |
| " " BELOW STANDARD - - -    | 5    | 8    | 22   | 2    | 7    | 14   | 14   | 4    |

